S. Hrg. 108–572

THE PROPOSED LEASE OF 100 KC–767 AERIAL REFUELING TANKER AIRCRAFT BY THE U.S. AIR FORCE

HEARING

BEFORE THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

SEPTEMBER 4, 2003

Printed for the use of the Committee on Armed Services

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SEPTEMBER 4, 2003

THE PROPOSED LEASE OF 100 KC–767 AERIAL REFUELING TANKER AIRCRAFT BY THE U.S. AIR FORCE

THURSDAY, SEPTEMBER 4, 2003

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, DC.

The committee met, pursuant to notice, at 9:35 a.m. in room SH–216, Hart Senate Office Building, Senator John Warner (chairman) presiding.

Committee members present: Senators Warner, McCain, Inhofe, Roberts, Allard, Sessions, Collins, Chambliss, Levin, Reed, Akaka, Bill Nelson, and Clinton.

Also present: Senator Patty Murray.

Committee staff members present: Judith A. Ansley, staff director; and Kenneth Barbee, security clerk.

Majority staff members present: William C. Greenwalt, professional staff member; Carolyn M. Hanna, professional staff member; Ambrose R. Hock, professional staff member; Gregory T. Kiley, professional staff member; Patricia L. Lewis, professional staff member; Thomas L. MacKenzie, professional staff member; and Scott W. Stucky, general counsel.

Minority staff members present: Richard D. DeBobes, Democratic staff director; Creighton Greene, professional staff member; and Peter K. Levine, minority counsel.

Staff assistants present: Andrew W. Florell, Michael N. Berger, and Sara R. Mareno.

Committee members' assistants present: Christopher J. Paul, assistant to Senator McCain; John A. Bonsell, assistant to Senator Inhofe; Jayson Roehl, assistant to Senator Allard; Arch Galloway II, assistant to Senator Sessions; James P. Dohoney, Jr., assistant to Senator Collins; Lindsey R. Neas, assistant to Senator Talent; Clyde A. Taylor IV, assistant to Senator Chambliss; Christine O. Hill, assistant to Senator Dole; Russell J. Thomasson, assistant to Senator Cornyn; Mieke Y. Eoyang, assistant to Senator Kennedy; Elizabeth King, assistant to Senator Reed; Davelyn Noelani Kalipi, assistant to Senator Akaka; William K. Sutey, assistant to Senator Bill Nelson; and Andrew Shapiro, assistant to Senator Clinton.

OPENING STATEMENT OF SENATOR JOHN WARNER, CHAIRMAN

Chairman WARNER. Good morning, everyone. The committee meets to receive testimony on the proposed lease of the 100 KC–

767 tanker aircraft by the United States Air Force. Pursuant to Section 133 of the National Defense Authorization Act of 2003, to establish guidelines for congressional review of this lease, the administration has submitted to the congressional defense committees a new start notification for this lease of 100 aircraft. Only if all four committees act favorably on the notification can the Air Force and Department of Defense (DOD) proceed with the lease.

When my distinguished colleague Senator Levin was chairman, he indicated that a hearing was appropriate. Now that I am in the chair, I concur in his judgment, and therefore this hearing is jointly called by the ranking member and myself.

We were also urged by other members of this committee to have this hearing to help inform the committee's consideration of this lease proposal. We are pleased to welcome today's witnesses on the first panel: Secretary of the Air Force Jim Roche; Acting Under Secretary of Defense for Acquisition, Technology, and Logistics Mike Wynne; and Deputy Director of the Office of Management and Budget Joel Kaplan. I look forward to your testimony and the testimony of our second panel of distinguished witnesses, which I will announce later.

This proposed tanker lease is a departure from the traditional acquisition process and has been the source of, I think, very important debate within the Senate and within the administration over a period of some 2 years. One point in the debate is eminently clear. It is vital to the national security of the United States that we have a robust aerial refueling capability. Tanker aircraft enable our forces to project military power around the world and are critical to our success in Operations Enduring Freedom and Iraqi Freedom. Far into the future the United States will require a fleet of aerial tankers to protect U.S. national security interests by extending the range of our fighters, bombers, lift, and surveillance aircraft.

The chiefs of all of the Services have personally communicated with me, I think in a most appropriate way, their concern for the need that this issue be addressed and somehow these tankers be acquired by this country.

So the issue today is not whether to replace the tanker fleet, but when and how and through what mechanism. The Air Force proposal, really the Department of Defense proposal because it has the concurrence of the Department as a whole, so the DOD proposal that we have before us today to lease 100 new tanker aircraft, is only the first step. The Air Force must come up with an integrated plan for the overall recapitalization of the 600-plus aircraft in the tanker fleet.

Well over $100 billion will be spent to modernize and maintain this fleet over the next 2 decades. Decisions made in the course of the deliberations on this issue will either cost or save the American taxpayers billions of dollars. We have an obligation to the taxpayers to very carefully assess this issue.

While there is disagreement about the costs of leasing these 100 tankers versus the cost of buying them, there is agreement that this lease will indeed cost more than an outright capital purchase of the fleet. But for this added cost, the Air Force will receive these aircraft into the fleet earlier. That is the pivotal decision, as to

whether or not the added costs justify the military requirement of receiving this fleet at an earlier date. Is there such an urgent and compelling case to be made for these aircraft that would justify incurring an additional expense on the American taxpayer? That is a pivotal question.

How does this lease comply with the terms of Section 8159 of the Department of Defense Appropriations Act of 2002, which requires the lease be an operating lease that meets the criteria described in the Office of Management and Budget (OMB) Circular A–11? How much is the premium that would be paid to lease the tankers versus an outright purchase? What impact would this added cost have on the Department of the Air Force's future overall acquisition requirements?

Why were other alternatives rejected, alternatives such as the reengining of older KC–135s or multi-year funding authority for a future buy of KC–767s, which some believe could have saved a considerable amount of taxpayer funds? How does that lease proposal address the maintenance and training issues, and is that the most cost-effective proposal?

I am confident this hearing will provide the committee valuable information in answering these and other questions. I note also that yesterday the distinguished chairman of the Committee on Commerce, Science, and Transportation conducted a hearing. We are in the process of reviewing the record of that important hearing yesterday. Now, once this committee has had time to review all of the information we deem appropriate, it is my intention to hold an executive session where our members can freely discuss this issue and share our views. I am not scheduling that session at this time. It depends on the volume and the amount we have to look at.

As a part of that discussion, we will then schedule the time at which this committee will vote. So we are not going to rush to judgment on it.

I would like to also just make another observation. My colleague on the right, Senator Levin, and I have been privileged to be on this committee for a quarter of a century. Other members have had very long terms. You look at this situation, and I went back and reviewed last evening the actions by the Appropriations Committee in which there is a legislative provision and indeed the actions taken by this committee in a conference report last year, to come to the conclusion that slightly more than 50 percent of the Senate, as reflected by the 29 or so members of the Appropriations and 25 on this committee, are making a decision without the benefit of the balance of the Senate, without the benefit of other Senators who are not on these committees participating in an open floor debate on the issue.

Now, historically we have done things in the Appropriations Committee by way of legislation. That has always been the case in the past and probably will be long after I am dead and gone. But with the magnitude of this contract, the importance and its relevance to our national security, I would be less than candid if I did not tell you as I work through this process with an open mind in no way have I indicated how I would eventually vote. I will not even entertain that thought in my mind until I have shared the

views of all the colleagues on this committee and such others that can contribute. I have this in my mind and it will be a factor.

[The information referred to follows:]

SECRETARY OF THE AIR FORCE
WASHINGTON

The Honorable John W. Warner
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman

This letter is to inform you of our intent to lease 100 Boeing 767 aircraft under the Multi-Year Aircraft Lease Pilot Program, in accordance with Section 8159 of the Fiscal Year 2002 Department of Defense Appropriations Act. Section 8159 requires that I submit a report to your Committee, at least 30 calendar days prior to commencing the lease, outlining plans for the Pilot Program, including terms and conditions and expected savings, if any, to be derived when compared to a direct purchase. That report is attached.

After a comprehensive and deliberate review that both validated the urgent need to start recapitalization of tankers now and the advantages of leasing, the Secretary of Defense approved the Air Force's proposal to enter into a multi-year Pilot Program for leasing 100 general purpose Boeing 767 aircraft on May 23, 2003. The dominant reason for proposing the lease is the advantage it affords for quickly delivering needed tankers to our warfighters without requiring significant upfront funding. Such upfront funding would harm combat capability.

We have separately prepared a New Start Notification for the KC-767A Tanker Lease Program, which will be sent to your committee for approval. This fulfills the requirement of Section 133 of the FY 2003 Bob Stump National Defense Authorization Act. Approval of the New Start will authorize the 100 aircraft, multi-year tanker lease program and a Training Systems Requirement Analysis required for FY03. We will not award a contract until the Defense Committees have approved the New Start request.

Sincerely,

cc:
The Honorable Carl Levin
Ranking Minority Member

Attachment:
Report to Congressional Defense Committees

Report to the Congressional Defense Committees

on

KC-767A Air Refueling Aircraft Multi-Year Lease Pilot Program

Introduction

Section 8159 of the Department of Defense Appropriations Act, 2002 (section 8159), authorizes the Secretary of the Air Force to establish a Multi-Year Aircraft Lease Pilot Program for up to 100 Boeing 767 air refueling aircraft under the terms and conditions cited in the legislation. The pilot program may not commence until 30 calendar days after the Secretary of the Air Force submits a report to the congressional defense committees detailing implementation plans and expected savings, if any, and describing the terms and conditions in the proposed contract. Subsequently, section 133 of the National Defense Authorization Act, 2003 (section 133), provides that the Air Force may not enter into this lease until it submits this report and until either funds necessary to enter into the lease are authorized and appropriated or new start notification for funds is submitted. This report is submitted in accordance with section 8159 and section 133.

This report begins with the operational requirement for air refueling and the challenges/risks faced today by our nation's aging air refueling fleet, showing the urgent need to begin recapitalization. Next it discusses a number of alternatives that were analyzed as possible solutions to meet that need. This report then compares the merits of leasing versus buying as acquisition strategies to accelerate the recapitalization effort with the selected platform, the KC-767A. Finally, it details the proposed lease agreement that fields 100 tankers five years faster than the current planned purchase. The Boeing 767 Multi-Year Aircraft Lease Pilot Program will be for the operating lease of these 100 KC-767A aircraft. The dominant reason for proposing the lease is the advantage it affords for quickly delivering needed tankers to our warfighters.

Operational Requirement

Air refueling tankers ensure our nation has the global reach to respond quickly and decisively anywhere in the world. They enable other aircraft to fly farther, stay airborne longer, and carry more weapons, equipment, and supplies -- at home and around the world. Air Force tankers refuel not only other Air Force aircraft, but Navy, Marine Corps and allied aircraft as well. They enable our entire force to protect our homeland, conduct combat operations, and provide humanitarian relief around the world. As we just experienced in Operation Enduring Freedom and Operation Iraqi Freedom, the Air Force tanker was a critical force enabler and force multiplier that allowed our coalition force to operate with impunity over a distant battlefield. Without a robust and reliable air refueling fleet, no existing war plan, humanitarian mission, or extended special air mission can be flown without the permission and concurrence of other sovereign nations for landing rights to refuel. In short, our National Security Strategy is unexecutable without air refueling tankers.

Tanker dependence in recent wars and the advanced age of the nation's air refueling aircraft fleet drive the Air Force's urgency to recapitalize as soon as possible. Today, a single 43-year old aircraft type, the KC-135, constitutes ninety percent of our combat air refueling fleet. Beginning manufacture under the Eisenhower administration, 732 KC-135s entered military service between 1957 and 1965. The remaining 544 KC-135s on duty today have the oldest average fleet age of any USAF combat aircraft. The current war on terrorism heightens our aging aircraft concerns. Subsequent to September 11, 2001, and on top of the growing commitments to actions around the globe, a more aggressive homeland defense posture further drove up the reliance and demands on our aging tanker fleet. The heightened tempo of operations is likely to continue for the foreseeable future. The military successes in Afghanistan and Iraq were critically dependent on air refueling to extend the range of our airlifters, sensor aircraft, and Navy, Marine Corps, and USAF bomber and strike aircraft. These conflicts, along with the on-going war on terrorism and heightened homeland security, have increased air refueling requirements. These actions are stressing our tanker fleet, especially our oldest and least capable tankers.

The cost of operating the existing KC-135 air-refueling force will continue to escalate. Corrosion, major structural repairs, and an increased rate of inspection are major drivers for increased cost and time spent in depot. This also directly decreases operational aircraft availability. Operational availability is expected to continue to decrease throughout the remainder of the KC-135's lifespan. Increasing signs of aging are evident today. Under these conditions of accelerating costs and declining availability combined with the increasing operational demands, the Department must begin to replace the KC-135s as soon as possible.

The USAF is committed to keeping this critical mission capability through investments in the KC-135 aircraft. But because of the observed increasing signs of aging and unpredictable nature of corrosion, the USAF recognizes the significant risk of having 90% of our air refueling fleet in one aging airframe. Independent analysis teams that visited the KC-135 depot maintenance line at Tinker Air Force Base unanimously recognized the uncertainties and increasing possibilities that this 43-year-old aircraft could encounter a fleet-grounding event, crippling our combat forces. Recapitalization can no longer be deferred; thus, potential solutions were examined.

On 1 Nov 2001, the commander of Air Mobility Command (AMC) signed a Mission Need Statement for Future Air Refueling Aircraft. On 30 July 2002, the Joint Requirements Oversight Council (JROC) approved the Operational Requirement Document (ORD) for new DoD air refueling aircraft. This air refueling aircraft is required to refuel Navy and NATO probe-equipped aircraft and aircraft fitted with USAF-type boom receptacles on the same mission. This provides interoperability advantages over the existing KC-135 fleet. The ORD calls for the new tanker aircraft to meet or exceed the KC-135R fuel offload capability. Additionally, the aircraft must be able to be refueled in flight by a boom-equipped aircraft, and must be capable of worldwide flight operations in all civil and military airspace. It must have the ability to carry cargo or passengers, as well as supporting aeromedical evacuation kits, to enhance its operational utility. The ORD also requires provisions for "Smart Tanker" growth capability, enabling future roles and missions enhancements.

Alternative Solutions

The Air Force analyzed several possible solutions as the first step toward tanker replacement.

a. **Maintain Current Force Structure**. First, the Air Force considered maintaining the current force structure until as late as 2040, as an earlier Air Force study predicted might be possible. However, it soon became apparent from depot activities that these studies underestimated the damaging effects of aging. The unpredictable nature of age-related corrosion – its timing, location, and extent – increases our concern for the risk of an event that would ground the KC-135 fleet. Consequently, continuing the status quo was rejected because the risks involved with indefinitely operating a fleet of aging aircraft are unacceptable. At that point, a KC-X program was put in the President's FY04 budget, but in light of affordability constraints, the program begins funding in FY06 and starts fielding aircraft in FY09. When the pilot leasing authority was provided in the Department of Defense Appropriations Act, 2002, the Air Force began to re-examine the issue but was unable to get an acceleration proposal ready for the President's FY04 budget.
b. **Re-engining**. When the Air Force re-examined the issue, we realized the need to recapitalize was more pressing than we had thought during development of the President's budget. At that point, the Air Force considered re-engining the aging KC-135Es, but recognized that this also did not address the aging issues, risks to our combat operations, or increasing costs. Under the re-engining option, these risks associated with the aging KC-135 airframe would persist. Re-engining would amount to spending billions of dollars and still having "old iron" that needs replacing.
c. **Commercial Derivative Aircraft**. Finally, the Air Force considered acquisition of commercial derivative platforms that included the B757, B767, B777, and the Airbus A330 in tanker configurations, considering both a lease option and a direct purchase.

Lease vs. Buy

The Air Force strategy is to replace the 544 existing KC-135 aircraft over the next 30-plus years. The strategy calls for acquiring air-refueling tankers derived from commercially available airframes to avoid the high costs of airframe research and development. The KC-767A is a tanker version of the long-range commercial derivative aircraft, developed and commercially offered to the international community by the Boeing Company. To begin the recapitalization of the 544 KC-135 aircraft, the Air Force considered two alternatives--a traditional procurement of 100 KC-767A aircraft, as contained in the FY04 President's Budget, and an operating lease of commercially derived air refueling tankers in accordance with section 8159.

A Traditional Procurement of Air Refueling Aircraft. As the FY04 President's Budget was being developed, the negotiations for the leasing proposal, authorized by section 8159, were unfinished. The Air Force accelerated the program objective of tanker recapitalization in the FY04-09 Future Years Defense Program (FYDP) by adding additional funding for a traditional procurement starting in FY06. Under this plan, the Air Force will order 21 aircraft in the FYDP

and deliver 1 by FY09. The 100th aircraft will be delivered in FY16. This recapitalization plan anticipates purchase of commercially developed aircraft, like the KC-767A, containing USAF options that meet the operational requirements approved by the Joint Requirements Oversight Council in July 2002.

An Operating Lease of Air Refueling Aircraft. An operating lease of commercially derived Boeing 767 air refueling tankers is authorized in section 8159. Under the lease, the contractor will deliver 60 new tankers to the warfighter by FY09, and deliver all 100 by FY11. This plan provides for a quicker recapitalization of the tankers in the fleet compared to the program of record in the FYDP. To match such a recapitalization schedule under the purchase option would require billions of additional dollars be invested during the FYDP. Since those funds are already committed to other uses, there would have to be significant restructuring and/or cancellation of ongoing and planned programs.

Other Alternatives Considered. In addition to these strategies, the Office of the Secretary of Defense (OSD) Leasing Review Panel evaluated several alternate procurement approaches in contrast to the lease or planned purchase. These included purchasing on the same delivery schedule as the lease, applying the funds necessary for the proposed lease to a traditional purchase, and a split lease-purchase arrangement. Carefully considering the implications of each, the Secretary of Defense determined that the lease was more advantageous and the preferred option.

Financial Analysis

Obviously, cost is a big driver when choosing an acquisition strategy. In isolation, a leasing strategy requires additional funds in then-year dollars relative to the cost of a traditional purchase. Economic considerations, however, are not limited to expected funding flows, which ignore the time-value of money. To account for the time-value of money and gain insight into the economic implications of leasing as an acquisition strategy, Office of Management and Budget Circular (OMB) A-94 directs a present value comparison between the proposed lease and a hypothetical purchase based on the same delivery/return profile. The financial analysis for the A-94 test is highly sensitive to the underlying assumptions such as purchase price, expected inflation and appropriate discount rate. However, in no case approved by OMB did the financial analysis indicate that the net present value of the lease option as being less than that of a traditional purchase. Applying the A-94 test, the Department of Defense determined that the net present value of the multiyear lease option and a traditional purchase option results in a NPV favoring a purchase of $150 million, as shown in Table 1[1].

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[1] In evaluating the net present value of the lease and purchase options as required by OMB Circular A-94, the Air Force relied on the availability of multi-year lease authority granted by Congress in 2002 Defense Appropriations Act. Had the Congress chosen instead to provide multiyear procurement authority and had the Department of Defense been able to accommodate that execution while preserving program stability, the NPV could favor purchase by up to $1.9 billion. While this information affords a measure of clarity in an equitable comparison of terms and NPV, it is provided with the understanding that neither multiyear procurement authority, nor related funding authorities were made available and, therefore, was not a viable option for the Administration's analytical consideration.

Table 1. Net Present Value: Lease vs. Purchase Analysis (NPV$)

	Lease	Purchase
Lease Payments w/ A/C return	$11.4B	N/A
Purchase Payments non-MYP w/ A/C sold	N/A	$11.3B
Ops and Support	$4.6B	$4.6B
MILCON and other Government Costs	$1.2B	$1.2B
TOTAL	$17.2B	$17.1B
Net Present Value Delta	$0.15B (1%) *Favoring Purchase*	

The advantages in schedule and reduced impact to currently budgeted programs outweighed the results of the A-94 analysis and drove the leasing decision. The Air Force and Department of Defense selected leasing as the acquisition strategy primarily based on affordability and minimizing budgetary impact to our plans for getting accelerated capability of the new weapon system to our frontline troops. As Under Secretary of Defense Aldridge pointed out, "This [lease] minimizes the near-term cost to the Department of Defense and delivers the aircraft sooner. If we were to purchase the aircraft and deliver them on the same schedule as the lease, it would require billions of dollars more in our Future Years Defense Plan. And reallocating that amount of money for other programs would result in a loss of military capability." In other words, it is an opportunity cost trade-off.

Under the lease option, the Air Force can afford to field this new fleet of tankers at a quicker pace than under a traditional purchase plan. Jumpstarting replacement of the older, less-capable tankers enables faster modernization of air combat forces. The lease not only advances the first delivery by three years, *it puts the 100 aircraft fleet at the disposal of our frontline commanders for combat operations by FY11, five years ahead of the planned purchase.* If we were to purchase these aircraft in a traditional buy on the same delivery schedule, while maintaining our financial top-line, we would have to take billions of dollars out of other important programs. The adverse impact to our combat capability would be traumatic.

Implementation Plan

Under the Pilot Program, the Air Force will contract to lease 100 aircraft. The lease program will be a sole source, using terms and conditions germane to commercial aircraft leases and commercial business practices in accordance with the Federal Acquisition Regulation and section 8159. Under this program, the Air Force plans to award a multi-year operating lease contract to Boeing for 100 KC-767As.

The Air Force intends to fund KC-767A lease payments with Aircraft Procurement appropriations. Three million dollars have been appropriated for this lease effort in FY03; no other funds have been specifically identified for this effort. Funds must be realigned to begin military construction for aircraft hangars and bed-down costs. A New-Start notification has been prepared and will be forwarded to the Defense Committees separately for approval.

This lease will be a three-party contract between the US Government, Boeing Integrated Defense Systems (IDS) and a third-party Special Purpose Entity (SPE), also known as the KC-767A USAF Tanker Statutory Trust 2003-1 (a Delaware business trust established 5 Mar 03), hereafter referred to as the Trust. Boeing IDS will administer the leasing arrangement and will be responsible for delivery of supplies and services under this contract. The Trust will issue bonds on the commercial market based on the strength of the lease contract with the US Government (rather than the credit worthiness of Boeing), will buy the aircraft from Boeing, and will lease them to the Government. The Trust will have an independent director, an employee of Wilmington Trust Company. The Trust will not make a profit but will provide for the funds necessary to pay bondholders and pay off the debt after the sale of the aircraft. Any residual funds acquired from the sale of the aircraft subsequent to lease termination will be refunded to the Government as an overpayment.

In the unlikely event that Boeing files for bankruptcy, the leased tanker assets are protected because they are owned by the Trust.

Under the negotiated contract, Boeing will provide contractor logistics support (CLS) for all levels of maintenance prior to the delivery of the first aircraft, including site activation efforts, flight test and FAA type certification of the KC-767A. After delivery, Air Force maintenance personnel will accomplish organizational level maintenance. All other maintenance support will be in accordance with established acquisition and logistics support directives (AFI 63-107). Commercial technical data (operations and maintenance) will be used and updated by Boeing's fleet support center. Boeing is currently working with Oklahoma City Air Logistics Center and local government officials on potential partnership agreements. Air Force Air Mobility Command (AMC) is the lead command for all Air Force KC-767A aircraft and will ensure FAA certification is maintained. Boeing will maintain configuration control as the lease administrator.

As is the case for many new weapon systems, the government will contract with Boeing to provide a fee-for-service Total Training System that will train all aircrew for flight test, initial cadre, initial qualification, upgrade, and continuation training. In addition, Boeing will provide maintenance training for the initial cadre, with remaining maintenance training provided through contractor and Air Force training. Following contract award, Boeing will conduct a Training Systems Requirements Analysis (TSRA) with AMC, Air Force Materiel Command and Air Education and Training Command to refine the KC-767A training tasks to be incorporated into the Master Training Task List. Boeing will be responsible for development of the aircrew and maintenance training devices. Boeing will also ensure site activation and installation of training devices at the first two main operating bases. Aircrew devices will include four Full Flight Simulators, three Boom Operator Trainers, and one Fuselage Trainer. Four Maintenance Training Devices will be defined during the TSRA. AMC is the lead command for KC-767A and will be responsible for the simulator certification.

The Trust is not a party to the training portion of the contract. The Trust's concern with CLS is that the KC-767s must be properly maintained to be marketable at the end of the lease.

The Department of Defense believes that the terms and conditions of the KC-767A Multi-Year Aircraft Lease Pilot Program contract comply with the requirements of section 8159 and meet all criteria of an operating lease defined by OMB Circular A-11. The terms and conditions are described in Annex 1. However, it is important to note that one of the tests under

OMB Circular A-11 requires that "the present value of the minimum lease payments over the life of the lease does not exceed 90 percent of the fair market value [FMV] of the asset at the beginning of the lease term". Our analysis showed that at the contracted lease price of $138.4M at the time of delivery, including $7.4M in construction financing, the lease payments would be 89.9% of the FMV, thereby meeting the requirement. However, if the FMV were taken to be the negotiated pre-construction price of $131M per tanker, which would require the Air Force to pay up front and then wait 3 years before delivery, the lease payments would be 93% of the FMV and thus, would not meet the requirement. The Air Force believes that a price of $138.4M represents the FMV as delivered to the Air Force under this lease at the beginning of the lease term and that the negotiated lease meets the 90% requirement.

The contract will include "Most Favored Customer" clauses stating that if Boeing sells comparable aircraft (up to 100) during the term of the contract for a lesser price, the Government will receive an equitable adjustment. To further guarantee the taxpayers receive a favorable deal, Boeing has agreed to a Return-on-Sales (ROS) cap of 15%, whereby, following an audit of their internal cost structure in 2011, any ROS in excess of 15% in either commercial or military manufacturing centers will be returned to the Government.

The lease portion of the program will begin upon delivery of the first aircraft. The contract will not be awarded until at least 30 calendar days have elapsed after submission of this report.

The Department of Defense is committed to examining possible options to reduce peak funding requirements in the out years of this lease. One such optional path is presented in Annex 2.

Basing Plan

As these aircraft enter service, current plans call for proposing the establishment of three main operating bases. The Air Force has announced that Fairchild Air Force Base (AFB), Washington, is the first proposed beddown location for the KC-767A, and that the second and third proposed beddown locations are Grand Forks AFB, North Dakota, and MacDill AFB, Florida, respectively. As we continue the beddown planning process, we will comply with the National Environmental Policy Act (NEPA) by analyzing the environmental impacts associated with the proposed beddowns at these and alternative locations. We will also comply with all applicable requirements of the BRAC 2005 process as set forth in the Defense Base Closure and Realignment Act of 1990, as amended.

Summary

The Boeing 767 Multi-Year Aircraft Lease Pilot Program authorized by section 8159, Department of Defense Appropriations Act, 2002, offers the Air Force the opportunity to begin recapitalization of our aging tanker fleet. Recent events and a heightened steady-state of homeland defense have spotlighted our reliance on these critical refueling assets. Tanker dependence in recent wars and the advanced age of the nation's air refueling aircraft fleet drive the Air Force's urgency to begin recapitalization as soon as possible. The KC-767A supports the requirements for our next generation tanker aircraft. The negotiated lease proposal would provide for the delivery of 60 aircraft within the FYDP and allow the Air Force to field the 100th aircraft by 2011, five years faster than current purchase plans. This lease minimizes near-term budgetary impact to other programs. Terms and conditions of the lease arrangement will meet all requirements of the FY02 Defense Appropriations Act including OMB Circular A-11 criteria for an operating lease. The Air Force recommends implementing the leasing alternative and providing the warfighters with new equipment sooner rather than later.

Annex 1: Proposed Contract Terms and Conditions
Annex 2: Possible Peak Funding Buy-Down

Annex 1

Proposed Contract Terms and Conditions

Section 8159 of Appropriations Act instructs the USAF to describe the terms and conditions of the proposed contract in a report to Congress. The USAF plans to include the following terms and conditions in its contract for the lease of tanker aircraft.

a. Aircraft operating lease for 100 KC-767A aircraft in accordance with FY02 Department of Defense (DoD) Appropriations Act, Section 8159, and as amended in Section 8117 of FY03 DoD Appropriations Act.

b. The contract will be between the Government, Boeing Integrated Defense Systems (IDS) and a third-party special purpose Delaware statutory trust identified as KC-767A USAF Tanker Statutory Trust 2003-1, also known as the Trust or the Lessor. Boeing IDS will administer the leasing arrangement and will be responsible for delivery of supplies and services under this contract. The Trust will issue bonds on the commercial market based on the strength of the lease contract with the Government (rather than the credit worthiness of Boeing), will buy aircraft from Boeing, and will lease them to the Government. The Trust will not make a profit.

c. The Trust will purchase the modified aircraft from Boeing IDS for $131M per aircraft (CY02$), subject to economic price adjustments that account for inflation and fluctuations in the cost of construction financing. The lease price for financing purposes will include the purchase price and construction financing interest for the aircraft.

d. The contract will include "Most Favored Customer" clauses stating that if Boeing sells comparable aircraft (up to 100) during the term of the contract for a lesser price, the Government will receive an equitable adjustment. Boeing's Return-on-Sales (ROS) will not exceed 15% for either the green aircraft or tanker modification. ROS will be verified by a public accountant in an audit opinion. Based on the independent auditor's findings, Boeing will provide a certificate of the earnings and if the earnings exceed the 15% cap, the Government will receive a refund of the difference.

e. The Lease term for each of the 100 KC-767A aircraft will be six years. Lease of initial aircraft begins in Aug 2006, with the last aircraft returned in Sep 2017.

f. Lease payments will be due on the lease inception date of each aircraft (immediately following aircraft delivery and acceptance) and thereafter on 15 February each year for the term of the individual leases. Payments to the Trust will be made in advance under the authority of 10 USC 2307.

g. The statutory authority under which the Government will enter into this contract does not allow the Government to purchase the aircraft. However, Boeing and the Trust have granted the Government the right to acquire title to some or all of the aircraft at any time should Congress authorize such a purchase and provide budget authority in advance through appropriation acts.

h. The Government has the right to terminate all, but not less than all, Aircraft under the lease and Aircraft that have not commenced construction for its sole convenience. The Government will give the Contractor and the Trust twelve months advance notice before terminating the lease and, upon return of the aircraft, shall make a special payment equal to one year's basic rent for each leased aircraft that is terminated. In addition, the price for the remaining aircraft to be delivered would be adjusted upward to include unamortized costs incurred by the Contractor that would have been amortized over the terminated aircraft and a reasonable profit on those costs.

i. The Contractor also will provide, under this contract, required aircrew/maintenance training and worldwide logistics support for leased aircraft. The performance metric for training will be measured by successful completion of training. The performance metric for logistics support will be aircraft availability. The logistics support is priced for an average aircraft availability of 80% and contains incentives and disincentives to motivate the Contractor to meet or exceed 80%.

j. The Government will pay for and the Contractor will secure commercial insurance to cover aircraft loss and third party liability, as part of the lease agreement. Aircraft loss insurance will be in an amount equal to the Stipulated Loss Value ($138.43M in CY02$) of the aircraft. The Government shall have the option to reduce the amount of hull insurance or eliminate hull insurance for damage to or loss of the aircraft, in effect self-insuring. Liability insurance will be in an amount not less than $1B per occurrence per Aircraft.

k. To the extent not covered by commercial insurance, the Air Force will indemnify the Trust (Lessor) and the lendors, under the authority of Public Law 85-804 and Section 8159 of the FY 2002 DoD Appropriations Act, for any claims by third parties arising out of the use, operation or maintenance of the Aircraft under the Contract.

l. At expiration of the lease term, aircraft will be delivered to the Trust in a KC-767A configuration with any Trust approved changes considered to be part of the general tanker configuration. Any USAF unique configuration changes are to be removed at Government expense prior to aircraft return. The KC-767A shall be returned with all inspections current and in FAA certified configuration. All life limited parts must be in "half-time" condition upon return.

m. Any residual funds acquired from the sale of the aircraft subsequent to lease completion over and above that required to pay off outstanding debt will be paid by the Trust to the Government.

n. The Contractor will warrant that, at the time of Aircraft delivery, each Aircraft will conform to the specification contained in the Contract and will be free from defects in materials and workmanship, and all services performed will be performed by employees or agents of the Contractor who are experienced and skilled in their profession and in accordance with industry standards. In addition, the contract will contain a 36 months warranty on the green aircraft beginning upon delivery from Boeing Commercial Aircraft (BCA) to Boeing IDS at

the start of the tanker modification. Upon delivery of the KC-767 to the Air Force, there is a six months design warranty and a twelve months material and workmanship warranty on the tanker modification and the remainder of the BCA green aircraft warranty (approximately two years). The contract also provides for limited warranties beyond these periods on certain structural components of the commercial aircraft.

o. Contractor retains ownership of all technical data in the aircraft and tanker modifications but grants the Air Force a license to use technical data necessary to operate and maintain the aircraft, as well as training of aircrew and maintenance personnel. This license extends to third party contractor personnel who perform support under Air Force supervision. Should the Air Force elect to contract out maintenance and training support, prospective contractors would be required to enter into a license agreement with the Contractor for use of technical data. The Contractor commits that any license will be offered at fair and reasonable prices consistent with commercial practices.

p. The contractor has no right to terminate the contract.

q. The price of logistics support is based on an average of 750 hours per aircraft per year across the fleet based on expected operations and deployment rates. The contract is pre-priced to support flexible adjustments to the flying hour program ranging from 400 hours per aircraft per year up to 1200 hours. Repairs and replacements for normal operating and maintenance standards that meet the users operational requirements are covered under this contract.

Annex 2

Possible Peak Funding Buy-Down

Background. The Department of Defense is committed to earmark an additional $2B in FY08 and FY09 for the purchase of aircraft covered by the multi-year pilot program under the terms in the proposed contract. The contract confirms that further statutory authority is necessary if the Department is to purchase any of these aircraft.

Discussion. These funds would be used for the direct purchase of aircraft in FY08 and FY09. Exercising this aspect of the negotiated lease would reduce the peak funding requirements in the FY11-13 period. Two key areas of cost avoidance are lease payments (in FY09-15) and the purchase of aircraft at the end of the lease (in FY14-15).

DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC

OFFICE OF THE SECRETARY

1 1 JUL 2003

SAF/LL
1160 Air Force Pentagon
Washington, DC 20330-1160

The Honorable John W. Warner
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman .

The purpose of this letter is to provide new start notification, as required by Section 133 of the FY 2003 Bob Stump National Defense Authorization Act, for the award of a contract to lease 100 KC-767 air refueling tankers. We will not award a contract until you have approved this new start request.

On May 23, 2003, the Under Secretary of Defense (Acquisition, Technology, and Logistics) announced the approval of the Air Force KC-767 tanker lease initiative. The agreement provides for leasing 100 KC-767 aircraft for six years each starting in 2006, based on a cost of $131 million plus $7.4 million construction financing per aircraft. Total lease payments for the 100 aircraft will be approximately $17 billion over the course of the lease, which extends to 2017. The dominant reason for proposing the lease is the advantage it affords for quickly delivering needed tankers to our warfighters without requiring significant upfront funding. Such upfront funding would harm combat capability. With an average age of over 43 years, the KC-135 fleet is the oldest combat weapon system in the Air Force inventory. The KC-767 will be the world's newest and most advanced tanker. It can offload 20 percent more fuel than the KC-135E and unlike the E-model, can itself be refueled in flight. It will also have the capability to refuel Air Force, Navy, Marine and allied aircraft on every mission.

By separate correspondence, the Secretary of the Air Force is forwarding a report to you detailing the terms and conditions as required by Section 8159 of the FY 2002 Department of Defense Appropriations Act.

No additional FY 2003 funds are required to award the lease contract. No lease payments will be required until FY 2006 when the aircraft will be delivered.

The Congress appropriated $3 million in FY 2003 for program office costs associated with the KC-767 lease initiative. We propose to use $720,000 of that $3 million to initiate a Training Systems Requirement Analysis (TSRA), the first activity under the lease contract, which will outline maintenance and aircrew training requirements to support the KC-767 fleet. The $720,000 is available for TSRA because FY 2003 program office costs will be less than planned due to the delay in the award of the lease.

Thank you for your continued support of our efforts to recapitalize our aging fleet. Similar letters have been sent to the Ranking Minority Member of your Committee and to the Chairmen and Ranking Minority Members of the other Defense Committees.

Very Respectfully

SCOTT S. CUSTER
Major General, USAF
Director, Legislative Liaison

Chairman WARNER. Senator Levin.

STATEMENT OF SENATOR CARL LEVIN

Senator LEVIN. Mr. Chairman, first let me thank you for your typically thoughtful opening statement laying out many of the issues facing us and doing it in a way which puts it in a context which is very important for us and for the entire Senate. In addition to your last comment pointing out the responsibility that falls on our shoulders as of the moment without the full Senate considering the pros and cons of this lease, there are also some very significant implications in terms of budget principles and budget precedents here.

The Budget Committee, as far as I know, has not looked at those. Those implications are in terms of what these long-term leases or a long-term lease of this nature would mean in terms of circumventing certain budget controls, such as limits on deficits and caps on deficit spending.

But I, too, approach this with an open mind. At this moment, I do not know how I would vote on this. I have determined to not reach a conclusion until after this hearing and after consideration of any other hearings of any other committees and carefully consider the materials presented to us.

There are, however, very significant issues which we must address. We are going to address those in a thorough way and in a thoughtful way and hopefully, even though the whole Senate may not end up participating in this decision, the entire Senate will feel as though it was given the kind of thorough, objective, and balanced consideration that it deserves.

This issue involves really two sets of issues. One are the military capabilities that are involved, and the importance of those capabilities. But there are also on the other side some very significant budgeting and financing principles which are at issue. They may or may not be in conflict, but in any event they are all worthy of our most thorough consideration. I again thank you, Mr. Chairman, for laying out the parameters of that consideration.

Chairman WARNER. In my judgment, the importance of this issue merits that those Senators who desire to make some preliminary opening comments should be given that opportunity. I would hope that we could keep them fairly brief and see to our witnesses.

Senator McCain.

Senator McCAIN. Thank you, Mr. Chairman. I note that the second panel is composed of Neal Curtin of the General Accounting Office (GAO) and Robert Sunshine of the Congressional Budget Office (CBO) and Dr. Richard Nelson of the Institute for Defense Analyses (IDA). These organizations testified before the Commerce Committee, all in opposition to this deal, both on grounds of cost as well as violation of the fundamental rules of the way that the government does business.

I hope we will pay close attention to CBO, CRS, and GAO, three respected institutions that give us the kind of technical expertise that is necessary to make these kinds of decisions.

Mr. Chairman, I made a long statement yesterday. I have a lot of questions for our witnesses. More and more information comes to light as we examine this issue, including a June 20, 2003, memorandum from the Director of Program Analysis and Evaluation (PA&E): "Our analysis indicates that the provisions of the aircraft lease cost more than the equivalent purchase of tanker aircraft measured in this-year dollars." All three witnesses testified that it is about a $5 billion difference in cost to the taxpayers.

PA&E memorandum: "We find that leasing provides no inherent economic efficiencies relative to direct purchase of tankers and is therefore more expensive in the long run." That is something we all agree on, as you said, Mr. Chairman. It is more expensive. "Our analysis shows that the current draft lease fails to meet the requirements of OMB Circular A–11." That is what the CBO, CRS, and GAO also testified to. This is shell games. This is an Enron entity run by the Air Force, owned by the Air Force, and yet a way of funneling money in a rather bizarre fashion, and one that is without precedent.

Here is an interesting memo. I will go into them later on, but it says "Ask us to put pressure on Mike Wynne to convince PA&E to write a new letter essentially undoing the first letter. Said he was not going to give answer, would get in trouble no matter how he answered. Roche said he was going to talk to Wolfowitz tomorrow."

The relationship between Boeing here and the Air Force is really remarkable. Mr. Chairman, there is no distance between the two of them. This is exactly what President Eisenhower warned us about. They are all on a first-name basis. They refer to my staffer as "Chrissy-Poo." It is really a remarkable kind of incestuousness that—I guess with the consolidation of the defense industries, now we are really down to two. I guess with this rotation of people back and forth from the defense industry into the Pentagon and back, it probably breeds a lot of this. They are all buddies.

There is now a criminal investigation opened by the Office of the Inspector General because of alleged leaking or giving—not leaking—giving the information that is proprietary by Airbus to Boeing. That is another allegation that is surfacing this morning.

This is really an unsavory deal, Mr. Chairman. Let me try to lift the level up a bit and point out, in The Washington Post this morning the editorial says: "Underlying all the controversy over the precise numbers is a far more troubling question: whether the leasing arrangement represents just one more way for this administration to push the costs of government onto future administrations and

future generations of taxpayers, an end run around normal procurement procedures.

"Leasing would effectively lock the government into buying the tankers without having enough money set aside to pay for them. That is reflecting a broader problem. The Defense Department wants to build and buy far more equipment, far more fighter systems, submarines, more combat systems, than it has funding to pay for. If the Air Force needs to begin to replace its tankers, it should do that and Congress should provide the necessary funds. If that requires tradeoffs with other programs, that decision should be made and made honestly, not put off for future administrations to deal with. The CBO said the tanker lease does not eliminate difficult budgetary decisions but 'merely postpones them.' This may be what a family needs to do when it is short on funds. It is no way to run a government."

[The information referred to follows:]

THE WASHINGTON POST

SEPTEMBER 04, 2003, THURSDAY, EDITORIAL

LEASE OR BUY? As with a family that's strapped for cash but needs a new car, that's the choice facing the Air Force, which says it must replace its aging fleet of Vietnam-era tanker aircraft as soon as possible but doesn't have the funds to buy the planes outright. Instead, under a novel financing deal that has been in the works for 2 years and is on the verge of winning final congressional approval, the military wants to lease 100 767s from Boeing to be outfitted as tankers, which are used for midair refueling to extend the range of warplanes. This deal—worth between $20 billion and $30 billion, depending on how it's measured, including the cost of buying the planes at the end of the 6-year lease—would have the advantage for the hard-pressed manufacturer of helping to keep its 767 production line open. The advantages for the country are more open to debate, but it's been promoted energetically by influential lawmakers including House Speaker J. Dennis Hastert (R–Ill.), whose congressional district is near Boeing's new Chicago headquarters. Three of four congressional committees have given the required approval, and the fourth, the Senate Armed Services Committee, will hold a hearing on the lease arrangement today.

There are two interrelated questions about this arrangement. One is whether new tankers are urgently needed. Tankers are increasingly important in an era of far-flung military operations. As recently as 2 years ago, the Air Force said its fleet would last until 2040 and that a new purchasing program could therefore be put off until 2013. Now the Air Force says that with tankers being used at a level not anticipated before the September 11 attacks, maintenance problems are increasing and replacements are needed soon.

Assuming that replacement is warranted and that the Boeing 767s are the right aircraft, there is the question of cost. Everyone agrees that leasing will cost more than a traditional purchase. The Air Force calculates that, given the lower cost of paying money later rather than writing the check now, the differential will be as little as $150 million. Other analysts peg the cost far higher. The Congressional Budget Office concluded that, even taking into account the financial benefit to the government of not having to pay the full cost up front, the leasing arrangement would cost $1.3 billion to $2 billion more than purchasing over time. Others who have questioned various aspects of the leasing arrangement include the General Accounting Office, the Congressional Research Service and the Defense Department's own inspector general.

Underlying all the controversy over the precise numbers is a far more troubling question: whether the leasing arrangement represents just one more way for this administration to push the costs of government onto future administrations and future generations of taxpayers, as Senator John McCain (R-Ariz.) suggested at a hearing yesterday. An end run around normal procurement procedures, leasing would effectively lock the government into buying the tankers without having enough money set aside to pay for them. That's reflective of a broader problem: The Defense Department wants to build and buy far more equipment—more fighter jets, more submarines, more combat systems—than it has funding to pay for. If the Air

Force needs to begin to replace its tankers, it should do that, and Congress should provide the necessary funds. If that requires trade-offs with other programs, that decision should be made, and honestly—not put off for future administrations to deal with. The CBO said that the tanker lease does not eliminate difficult budgetary decisions but "merely postpones them." This may be what a family needs to do when it's short on funds. It's no way to run a government.

No analysis of alternatives (AOA) was conducted. Perhaps one of the reasons for this—and I was talking about the relationship that exists before—is a memorandum briefing Boeing, Mr. Gower: "Objective: Establish clearly-defined requirements in order for the U.S. Air Force tanker configuration that results in an affordable solution, meets the USAF mission needs, and will prevent"—"and will prevent an AOA"—an analysis of alternatives—"being conducted." That was Boeing's objective. That was the Secretary of the Air Force's objective, and that is what they achieved.

There was no AOA conducted, which is normal in any acquisition process. There was no study of the Air Force corrosion problem, a dramatic turnaround from 2 years before, where the Air Force said that their tankers were good for the next 20 years. No analysis of that.

Mr. Chairman, the fix was in and it is really a remarkable and unfortunate kind of situation that we are here today asking the taxpayers to pay $5 billion in additional funds with a shell game, Enron-like entity funneling the money through and, by the way, a $5 billion maintenance contract that itself was not competed.

Mr. Chairman, we are talking about real money here, and since we obviously have dramatically increased expenses anticipated, according to reports this morning $65 to $70 billion for our operations in Iraq, I think we ought to really look carefully at this. Again, if the Air Force makes the case that they need to replace this tanker fleet, then why do we not do it in a procurement fashion with an authorization, not by the Appropriations Committee without a hearing, but through the proper process, which is that the military comes forward, the Department of Defense comes forward, with a request, with a proposal, we have hearings for it, and we authorize the procurement of those aircraft.

Instead, as The Washington Post points out, an end run was completed. To show the enormous influence of the special interest, three of the four committees approved this deal without ever having the lease being completed. I understand, according to reports, that last night Boeing and the Department of Defense finally completed a deal. But three of the four oversight committees approved the deal without the deal being completed and without us ever seeing it. By the way, I have questions about what I have heard about that deal.

So, Mr. Chairman, I hope that what we really need to do here, as I think you may have indicated in your opening remarks, is take a little time. Have this committee exercise its oversight responsibilities, as you are seeing today. Look at all the evidence, see why the major watchdog agencies, the people we ask, the CBO, CRS, and GAO, all say that this is a bad deal for the American taxpayers, and then make a measured decision.

I appreciate your and Senator Levin's interest and involvement in this issue. Thank you, Mr. Chairman.

Chairman WARNER. Senator, you noted the second panel, the participants. That was intentionally done to give a balanced perspective to this hearing.

I also suggest—are you going to incorporate those documents in the record?

Senator MCCAIN. Yes, I will.

Chairman WARNER. Without objection.

[The information referred to follows:]

OFFICE OF THE SECRETARY OF DEFENSE
1800 DEFENSE PENTAGON
WASHINGTON, DC 20301-1800

PROGRAM ANALYSIS AND EVALUATION

JUN 20 2003

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE (ACQUISITION, TECHNOLOGY, & LOGISTICS)
UNDER SECRETARY OF DEFENSE (COMPTROLLER)

SUBJECT: PA&E Analysis of KC-767A Lease Program

This memorandum provides a summary of the A-94 and A-11 analyses developed by PA&E in response to taskings from the leasing review panel and subsequent leasing working group meetings. The analyses are based on the latest version of the draft 767 leasing contract provided to my office on June 17, 2003.

Our A-94 analysis indicates that the provisions of the draft KC-767A aircraft lease cost more than the equivalent purchase of tanker aircraft. Measured in then-year dollars, lease costs exceed purchase costs by $6.0B; by $5.1B if measured in constant FY02 dollars; or by $1.9B if measured in terms of net present value. Our A-94 analysis is based on the following key assumptions: 1) For the leasing scenario, that the Department purchases the KC-767A tanker aircraft at the end of the lease period; and 2) for the direct purchase scenario, that the Department seeks and receives Congressional approval for a multi-year procurement of 100 aircraft. We find that leasing provides no inherent economic efficiencies relative to direct purchase of tankers and is, therefore, more expensive in the long run.

Our analysis also shows that the current draft lease fails to meet the requirement of OMB Circular A-11 that the present value of the lease payments be less than 90 percent of the fair market value at lease inception. Our calculations show that lease payments are more than 93 percent of fair market value, exceeding the requirements for the definition of an operating lease. This analysis is based on a fair market value of $131 million (CY02$). In addition to OMB Circular A-11 requirements, Section 8159 of the FY02 appropriations act includes a requirement that the present value of the lease payments be less than 90 percent of the fair market value at lease inception.

A more detailed supporting analysis will be provided under separate cover.

Krieg
Director

FOR OFFICIAL USE ONLY

Arnstad, Patty

From:	Albaugh, Jim
Sent:	Monday, June 23, 2003 3:00 PM
To:	Arnstad, Patty
Subject:	FW: Roche mtg 23 Jun 03

per Valerie's note

-----Original Message-----

From:	Owens, Thomas A
Sent:	Monday, June 23, 2003 11:22 AM
To:	Albaugh, Jim
Cc:	Ellis, Andrew K
Subject:	Roche mtg 23 Jun 03

Jim--as best I can reconstruct:

Tankers - He started with "we have a big problem"--referring to the (apparently PA&E) question "if you need tankers so bad why is AF retiring KC-135Es early." He made reference to "Chrissie Poo" several times. He is a McCain staffer.

WRT dialogue ref "best price ever", he seemed to be concerned more for Marv's benefit than he was himself. He did make recommendations that we consider all factors e.g. non-recurring costs, improvements made to subsequent aircraft, NPV, rate of build, white tails etc. Bound the research by time--i.e. look back 10 years. Marv having trouble with some over issue of $138M vs $131M.

Ask us to put pressure on Mike Wynnne to convince PA&E to write new letter essentially undoing the first letter. He said he was not going to answer--would get in trouble no matter how he answered. (John Manning attempting to get mtg for you tomorrow). Roche said he was going to talk to Wolfowitz tomorrow.

Meanwhile the report is stalled until Craig or someone else figures out that the letter is going to embarrass the SECDEF.

BTW--Wynne, Roche, Sambur, Craig PA&E (sp?) and Semborski (the deputy) having tanker mtg at 3:30 this afternoon.

FCS - He quickly got off on the notion that it was a long way from the "C4 to the truck"--you know more than I -- sounds like an issue of open architecture where either legacy truck or new truck would be suitable.

EELV - A very messy issue to say the least.

FA-22 - He said he thought improvement was stalled out at five hours--Bob B confirms that but we are getting better. Part of problem is just keeping 4006 flying.

Mentioned briefly---

C-17 MYP good to go--I think he was referring to funding profile for this year.
Wedgetail--Australia (EW--BAE vs Elisera??)
Classified Program
Would like Sen Roberts support at next hearing.

TKR 006 0027

TKR 011 0116

Boeing Proprietary

Acquisition

This document may contain trade secrets or confidential/proprietary/commercial/technical/other business information. Unauthorized disclosure prohibited by law.

Element: ORD Owner: Gower

Objective

- Establish clearly defined requirements IN ORD for the USAF Tanker configuration that results in an affordable solution that meets the USAF mission needs and will prevent an AoA from being conducted

Issues / Concerns

- USAF configuration different than GTTA
- Tight proposal/negotiation schedule to get 150 additional changes defined and priced
- Potential exists for affordability problems
- Too robust USAF configuration may cause resale difficulties in the unlikely event USAF would return aircraft
- Program go-ahead required March 1 to meet schedule

Near-Term Actions

USAF ILS meeting	Feb 6
Daniels meeting on early start	Feb 14
Price 150 items for CAIV analysis	Feb 23
USAF CAIV meeting	Feb 27
OSD agreement that is USAF program	TBD
AMC ORD approval	TBD
USAF ORD approval	TBD

DRAFT

2/6/02 Boeing Proprietary 1

Chairman WARNER. Further, you used the term "criminal" in connection with the Inspector General of the Department of Defense. I met with him extensively yesterday on another matter, but we did have some discussion, preliminary discussion, on what you alluded to. But in my listening to him, he did not invoke the word "criminal." So I am going to ask this morning the staff call him and to ask him to prepare a very short letter describing precisely what it is he intends to do with material that has been given him, so that we have that matter clarified before this hearing is completed, and that will be done.

Senator MCCAIN. Thank you, Mr. Chairman. I point out, I was referring to media reports that an investigation had been called for. From the information that I have received, maybe an investigation is called for.

Chairman WARNER. I probed it pretty carefully last night with him.

We will now turn to Senator Reed. Do you have an opening statement?

Senator REED. I have no opening statement.

Chairman WARNER. Fine.

Senator Inhofe.

Senator INHOFE. Mr. Chairman, it is not my intent to have an opening statement. I would have to echo your opening statement and that is that there are serious concerns. I am coming to this meeting with an open mind, and this is a very rare thing in government, that we get to this point and minds are not already made up. So I will be looking forward to the hearing, looking forward to trying to make the right decision.

Chairman WARNER. I thank you. I enjoyed our exchange last night on the issues. You were helpful to me, Senator, as you always are, because you have a special insight into the aircraft business. Senator Clinton.

Senator CLINTON. Mr. Chairman, I too want to thank you for holding this hearing. I think it is indicative of your leadership and your openness. I would just add a few points.

I think there is general agreement that the Air Force needs more tankers. I would posit that. I think that should be the basis on which we go forward. The issue is how best to obtain those tankers as soon as possible, put them into service, and have them utilized.

I am struck by the various questions concerning this particular approach to obtaining the tankers. I do not have a positive or negative feeling about the process. I appreciate the effort to find out more information. But I do think there are other related issues, that the context of this should be recognized.

We are going over this leasing arrangement with a fine-toothed comb and we are putting out billions of dollars in contracts for the reconstruction of Iraq and not knowing a single thing about them. Senator Collins and I and Senator Wyden have been trying to find out information about Halliburton and Bechtel and others who just basically have been handed billion-dollar open checkbooks, and there has been very little, if any, oversight by anyone in Congress.

So I hope that this hearing and the rather significant amount of information that has been forthcoming will serve as a model for other contracts that are being entered into, in this case without any information or oversight.

Second, part of the dilemma we find ourselves in is our failure to be honest about the costs that we confront and the ability of our Government to sustain these costs into the future without adequate revenues. This is not a problem that is going away, no matter how often people try to pretend that it does not exist. It is, to use an appropriate metaphor perhaps, it is the giant elephant in the room. This is a huge issue.

We are not paying as we go and we are not acting responsibly about how we fund critical needs like national defense. So this leasing agreement, looked at on the side as though it were some aberration, is part of a much larger pattern of fiscal irresponsibility and failure to acknowledge the real costs of our undertaking the kind of missions that we are currently committed to.

So, Mr. Chairman, I think that it is imperative that we come to an answer on this because clearly, in my review of what I have been given, the Air Force needs these tankers. Our continuing missions require this kind of capacity. But I think we should take a very hard look at the broader context in which this hearing is being held, because we are focusing on one relatively small, albeit very important, issue and we are failing to look at the entire context that this is occurring in.

So I thank the chairman for having this hearing and I look forward to the information.

Chairman WARNER. Senator, I appreciate that. I note also your reference to contracts in Iraq. You will recall the debate that we had on the floor with the Boxer amendment. She took an initiative and we joined on that and did put some piece of legislation in.

But I will refer to what we did on the floor and the subsequent actions by the Department. I think you raise a question that is certainly within the province of this committee to look at.

Senator CLINTON. Thank you.

Chairman WARNER. Thank you.

Senator Roberts.

Senator ROBERTS. Thank you, Mr. Chairman. I do have a statement, and I come to this issue as chairman of the Subcommittee on Emerging Threats and Capabilities, not as, as has been alleged, in terms of special interest concerns.

Mr. Chairman, Scottish novelist Tobias Smollett, a name that does not ring in history, he said and noted once that: "Facts are stubborn things." He is right. They often get in the way of the arguments that we want to make. In Dodge City, Kansas, we simply say nothing hurts the truth so much as stretching it or ignoring it.

In the run-up to today's hearing, we received a number of reports asserting various claims regarding the cost and the justification for the Air Force's proposed tanker lease. It seems to me that much of the criticism contained in those reports ignores key facts and obvious facts. Those facts are these:

Number one, our tanker fleet is absolutely critical to our military's ability to defeat the many threats we have abroad. That has been testified to over and over again by Chairman Myers and also Secretary Rumsfeld.

Number two, 90 percent of our aerial refueling fleet is more than 40 years old, most of them around 42 to 45, older than many of the pilots flying the KC–135, resulting in increased maintenance costs and higher risks of fleet-wide problems. If you shut down this fleet, if you have a class problem in terms of corrosion or any other problem, you stop the war or you stop our ability to wage war, you endanger our national security in regards to access denial.

Number three, the proposed lease will allow the Air Force to begin to modernize its fleet 5 years earlier than a traditional procurement and will save up to $5 billion in modifications planned to keep the KC–135E flying. Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom once again demonstrated the importance of tankers to our military's ability to defeat various threats abroad.

No one challenges the importance of these aircraft, but some ask why we need to modernize the fleet now. The answer is simple: Our tankers are the oldest combat aircraft in the Air Force. Seven years ago, the GAO noted that the KC–135s were taking progressively more time and money to maintain and operate and questioned the fleet's long-term serviceability. After avoiding the issue of tanker modernization for years, the Department and the Air Force have now come forward with a plan, along with some of us in Congress, that will field 100 new tankers 5 years earlier than the traditional procurement and would allow the Air Force to avoid again up to $5 billion in KC–135E modification costs, that is not reflected in the OMB estimate by the way.

The Air Force has acknowledged that leasing the aircraft will be more expensive than buying them outright, but justifies the premium not only on the basis of saving maintenance costs, but also the enhanced ability and capability available to the warfighter

through the 767 lease. That is my number one concern, the warfighter.

I am well aware of the various cost analyses on the lease proposal. Many of these analyses are based on very sensitive assumptions. However, these studies do not address the fact that this proposal will reduce the KC–135 maintenance and operation cost while increasing warfighter capability.

Why would we reject this plan and choose to spend up to $5 billion to keep 40-, then 45-year-old aircraft flying? The time has come to solve, not put off, this problem.

Finally, I am well aware of the other criticisms of the proposal as well: allegations that the lease does not satisfy OMB requirements, suggestions that the corrosion problems are not as significant as the Air Force claims—and I will have a question for Secretary Roche as to that claim or as to that allegation—and questions about the competition.

However, in the final analysis the issue comes back to stubborn facts. OMB has concluded the proposed lease satisfies its requirements. The corrosion problems and the costs of continuing to operate the KC–135 will continue to escalate in the future. With regard to competition, what other aircraft manufacturer currently has an aircraft in production that meets the Air Force's requirements?

It seems to me that if we reject this proposal or continually put it off it will only ensure that future missions and the men and women who fly them are put at greater risk than need be while the government continues to spend increasing amounts of money to keep 40- and 45- and 50-year-old planes flying.

I would urge my colleagues to approve the lease. I know we are going to take time in doing that.

Mr. Chairman, I have three press articles: one from the Wall Street Journal as of September 3; one from the Defense News as of September 1; and one from the Washington Times as of September 3, and would ask permission that they be inserted in the record at this point.

Chairman WARNER. Without objection.

[The information referred to follows:]

Wall Street Journal
September 3, 2003

John McCain's Flying Circus

No one denies that the U.S. Air Force needs more refueling tankers. The only questions are how and when to get them. Senator John McCain calls the Pentagon's answer, a leasing arrangement with Boeing, an unsavory example of the modern "military-industrial complex," a mistaken argument he will no doubt pursue today at hearings before his Commerce Committee.

It's hard to overestimate the importance of these flying gas stations. Long-range bombers make it to their targets only because they can refuel in the air. It was our tankers that enabled coalition aircraft to circle high above Iraq's battlefields for hours, providing ground troops with the capability to call in immediate, precision air strikes on emerging targets. "Our tanker force is what makes us a global power" is the way the Air Force chief of staff, General John Jumper, puts it.

Yet for all that power, America's tanker fleet is in sad shape because the tankers are simply too old to keep flying. The Pentagon is hoping to remedy this quickly by leasing the tankers from Boeing, and three of the four relevant committees in Congress have given their approval to the contract. The fourth -- the Senate Armed Services Committee -- will hold hearings tomorrow. Senator McCain's Commerce hearings today are his way of trying to preempt approval by running up his own Jolly Roger.

Let's hope he doesn't draw the fight out too long. The average tanker is now more than 43 years old. During a visit last year to Oklahoma's Tinker Air Base, then-Air Force Secretary James Roche realized the urgency of the problem when he peeled back the skin of a tanker being refurbished and found the metal underneath disintegrating.

Age isn't the only problem. Not only will the new Boeing 767s be able to refuel all planes in the military's inventory -- unlike the existing KC 135E's -- they carry up to 20% more fuel and three times the cargo. And the leasing arrangement used to get them to the Air Force is similar to the way foreign militaries buy planes, selecting off-the-shelf technology and then signing a contract for rapid delivery. This is how Israel and Singapore get the latest F-16s five years before the U.S. Air Force.

We're as opposed to sweetheart deals as anyone. But it seems to have escaped Senator McCain's notice that Boeing's main competitor here, the European consortium that produces Airbus, virtually defines corporate welfare. And so far as we can tell, the e-mails between Boeing, the Pentagon and the Air Force released by his committee last week seem to show only that Boeing was lobbying hard for a multibillion-dollar deal (surprise!) and that cost was a big concern.

In short, the real issue the Senate Armed Services Committee needs to zero in on here isn't just overall lifetime cost but value for money. The Air Force needs tankers now, and the leasing arrangement was deemed the way to get tankers into its hands most expeditiously, not least because it bypasses procurement procedures that could stretch out a buying decision for years.

Senator McCain and other critics like to talk about what he says are the billions more that a leasing deal will cost over buying these birds outright. Leaving aside the huge dispute over the price tag, let's hope the Armed Services Committee considers the costs our military might incur by not getting these tankers as soon as possible.

Defense News
September 1, 2003
Pg. 35

Tanker Lease Will Save Money, Protect Lives

By Loren Thompson

Operation Iraqi Freedom provided the latest proof that the U.S. Air Force's fleet of 600 aerial refueling tankers is a critical enabler of the entire joint force. About 8,000 tanker missions were flown to extend the range and flexibility of U.S. planes, a mission that became even more important once regional allies limited coalition access to their bases.

Carrier-based planes in the Mediterranean probably could not have gotten to the fight at all without tanker support — a repetition of their experience over landlocked Afghanistan, where tankers flew a staggering 15,700 missions during Operation Enduring Freedom.

But part of the tanker fleet didn't manage to make it to Iraq. They were the 120 oldest KC-135E tankers built during the administrations of presidents Eisenhower and Kennedy. The Air Force was reluctant to send them east of Spain because they were so decrepit, they might break down and clog airfields. A handful were used for trans-Atlantic runs, but east of Gibraltar they were missing in action.

That story is worth keeping in mind as the U.S. Senate holds hearings on whether the Air Force should be allowed to lease 100 new 767 tankers from Boeing Co. to replace its oldest tankers. Opponents of the lease, who are more vocal than numerous, argue that the lease is an unnecessary windfall for the struggling aerospace giant.

They are completely wrong. The case for the lease is so overwhelming that approval by the full Senate is nearly certain. Before critics start complaining about the undue influence of the "military-industrial complex," they ought to consider some uncomfortable realities.

After a decade of undersized investment in military technology, every category of Air Force plane except bombers either has exceeded its maximum acceptable average age, or is within months of doing so.

By far the oldest category of plane is the tanker, especially the 540 KC-135s that make up 90 percent of the tanker fleet. They average more than 40 years old.

KC-135s are basically military versions of the venerable Boeing 707, a plane most commercial airlines retired a generation ago. The Air Force kept flying them, and now some critics seem to think they will be airworthy for another 40 or so years. That's how long it would take to replace them under normal purchasing practices.

There's no way of knowing how long they will last, because no one has ever flown large jets for this long. What we do know is that on any given day, between a quarter and a third of them are grounded because they need repairs. Just like old cars, old airplanes need a lot of care.

Unfortunately, breaking down in flight is a little different from breaking down on the interstate. KC-135s are showing numerous signs of corrosion and parts obsolescence that could produce tragedies in the years ahead if they are not expeditiously replaced. Critics of a lease say the airframes can be rebuilt,

but how would you feel about flying military missions in a plane that most airlines retired when you were a kid?

The best solution to this problem is to buy a lot of new tankers, and fast. But the only way the Air Force can do that at a time of billion-dollar-per-day deficits is to take it out of other items like readiness or fighter modernization. Nobody is likely to back cuts in readiness when U.S. forces are stretched thin overseas. As for cutting fighter modernization, F-15s are already operating under flight restrictions due to age-related metal fatigue.

So using a lease is the only alternative to delaying acquisition of new tankers. It enables the Air Force to get a hundred tankers into the field five years earlier than outright purchases would. Gen. John Jumper, Air Force chief of staff, says the lease would save $3 billion in maintenance costs on the KC-135.

But what about all the other costs associated with leasing rather than buying? In the current economic environment, these amount to a mere $150 million — basically, the cost of one airplane spread over a decade. In return for paying that rather minimal premium, the Air Force can get 100 new tankers fielded at the beginning of the next decade, rather than the end.

The plane the Air Force wants is a modified Boeing 767. In fact, it is the only plane in the world that currently meets service specifications. The company is guaranteeing the Air Force its lowest price, including rebates if any other customer gets it for less. When the six-year lease expires, the Air Force has the option of buying the planes for $40 million each (a very reasonable price for a widebody jetliner).

Leasing arrangements are standard practice in the airline industry, so what's wrong with the Air Force getting the same mileage out of its own scarce funds? Most of the supposed drawbacks of leasing are imaginary, while the benefits to warfighters are real.

If critics don't like leasing, they ought to at least explain how they would avoid one day sending U.S. pilots to war in 60-year-old planes.

Loren Thompson, chief operating officer of the Lexington Institute, Arlington, Va., who also teaches in Georgetown University's Security Studies Program.

Washington Times
September 3, 2003
Pg. 15

Air Force's New Lease On Life

By Frank J. Gaffney, Jr.

When Senate Commerce Committee Chairman John McCain opens a hearing today on an Air Force proposal to lease 100 Boeing 767 tanker aircraft, he will cast himself as a defender of the public interest against wasteful defense spending. It is, therefore, no small irony that this hearing — and the dilatory, many-months-long process it culminates, is the real waste of time and energy, to the detriment of the national security.

After all, as members of the Commerce Committee surely know, most Americans understand full well the nature of leasing. Tens of millions of them have taken advantage of this practice to make use immediately of cars and other products that they could not otherwise afford to buy for some time, if ever.

The commercial aviation industry has also employed this approach to fleet modernization for years. It is a prime example of the sort of Best Business Practices that the Bush-Rumsfeld team has been trying to use to maximize the Pentagon's proverbial bang-for-the-procurement buck.

In particular, the centerpiece of Mr. McCain's criticism of the Pentagon's tanker acquisition initiative — the contention that it will cost somewhat more to lease these planes (with an opportunity to buy them later) than it would to purchase them immediately — will hardly surprise either the consumers or businesspeople the Senate Commerce Committee is supposed to serve. They appreciate that this is the way leases generally work. They also know, though, that if the money is not available to buy a needed product in the near-term, leasing is often the only way it can be obtained, usually with the desirable effect enhancing an individual American's safety, productivity and/or quality of life or improving the competitiveness of U.S. companies.

Rarely has an acquisition been more necessary, however, than is the case with aerial-refueling tankers. Such aircraft are the sine qua non of U.S. power projection. As the recent efforts to liberate Afghanistan and Iraq have underscored, the rapid and sustained deployment of American forces to the world trouble-spots depends heavily on airlift. Airlift, in turn, depends critically on tankers. Shortfalls in the tanker fleet very rapidly translate, literally, into an inability to support the troops.

Unfortunately, such shortfalls are currently acute and projected to become even more so in the years ahead. The average age of the existing tanker fleet is some 40 years old, making many of the KC-135 aircraft that continue to be the backbone of the refueling inventory older than their pilots. A third are in the hanger for repairs at any given time. And even when they are flying, their performance is severely limited.

In short, the need for modernization of the KC-135 fleet has been obvious for years and the virtues of accomplishing it via the modified 767 are equally so.

Yet, for too long, a succession of administrations and Congresses have chosen to put off to the future the daunting task of funding such an upgrade program. Evidently, some foolishly believe that this continues to be a responsible and safe thing to do

The good news is that the common sense and hard experience of most Americans — and solid majorities of the four congressional defense committees (three of whom have already approved the Air Force lease; the fourth, the Senate Armed Services Committee, is expected to do so on Thursday) — enables them to appreciate the folly of perpetuating such a practice. They recognize that tankers, like old cars, computers, manufacturing machinery and expensive household items, tend to be less reliable than new ones. Certainly, the costs of maintaining the former greatly exceed the latter.

Not surprisingly, critics of the Air Force's tanker lease proposal tend to ignore the costs entailed in keeping the oldest KC-135s operational. This may help their analysis, but it does not reflect reality. If, instead of using new 767 airframes over the next 10 years, the Pentagon has to try to keep the oldest of its tankers safe and serviceable, the price tag will be staggering. By some estimates, it could run as high as $5 billion.

The real world requires that such additional costs be taken into account in any net assessment of leasing tankers versus preserving the status quo. When such costs are considered, the argument for a lease is a slam-dunk. That is even more true when augmented by such considerations as the enormous operational advantages of quickly securing the use of higher-performing tankers.

Of course, the cost-avoidances described above could also be achieved were we simply to purchase the needed tankers outright and they could be delivered right away. But neither Mr. McCain nor anyone else in Congress seems willing to provide the additional billions of dollars that would be needed up front in order to buy, rather than lease, these aircraft. Even if they did, it will take years longer to get new, rather than modified 767s. As a result, the alternative to the lease currently on the table is to condemn our servicemen and women to a no-kidding Mission Impossible — waging a global war on terror without the aerial-refueling assets indispensable to defeating the myriad enemies who wish to do us harm.

As the legislative branch works to help President Bush and Defense Secretary Rumsfeld "transform" the U.S. military in order to fight and win the nation's 21st century wars, there are few actions Congress can take that will have a greater, near-term transformative effect than would its approval this week of the lease of 100 new tankers. The American people surely understand the transaction that will make such an acquisition possible. They are unlikely, however, to comprehend — or forgive — further, unwarranted interference with its prompt execution.

Frank J. Gaffney, Jr. is the president of the Center for Security Policy and a columnist for The Washington Times.

Chairman WARNER. Senator Allard.

Senator ALLARD. Thank you, Mr. Chairman.

This proposal I believe before us is unprecedented. The Air Force strongly believes it needs new aerial refueling aircraft. I agree that new aircraft is a requirement that must be met, and in fact I would strongly support the appropriation of funds for such aircraft. However, this is not what the Air Force intends to do. Instead, the Air Force has brought a proposal before this committee that would circumvent our budget and appropriations processes and potentially cost the taxpayer billions more than if the Service would have purchased the planes directly.

I participated in a hearing yesterday, Mr. Chairman, on the Budget Committee and I specifically asked the question, had they ever seen this procedure before in budgeting. The answer was no, implying that this was a budget precedent that had never been used before. I hope that our panel members that you have called can affirm or perhaps bring forward a different view on the answer that I got yesterday from the Budget Committee.

It is my view that if this proposal is adopted by other agencies it would make our budget meaningless. It creates a hidden liability, disguising our true deficit and debt numbers.

I believe we must be very careful as we listen to our witnesses today. There is more at stake than 100 tanker aircraft. Congress

must agree to fund this program in its entirety or else risk incurring substantial termination fees. Congress must also agree to purchase the planes at the end of lease or risk wasting nearly $20 billion of the taxpayers' money.

We must also recognize that this is only the beginning. The lease program before us will replace just over 100 tankers. There are still another 400 that will eventually need to be replaced. This tanker recapitalization proposal in my view is not the end. In fact, it is only the beginning.

I would also share the same concerns that my colleague Senator McCain brought up on the acquisition processes that Boeing has been applying recently. I also read the same article Senator McCain had read, where it said the Air Force—it talked about how the Air Force had canceled more than $1 billion in contracts with Boeing to launch rockets after it was determined that the company improperly obtained thousands of sensitive documents belonging to rival Lockheed Martin. Then—it stated, it talks about how the Pentagon has launched a formal investigation to determine whether a former Air Force official broke the law by passing information to the Boeing Company about a rival bid for a $21 billion contract to lease aerial tankers.

Ignoring the procurement rules seems to be a chronic problem with Boeing and I am concerned about that. Mr. Chairman, I think this committee ought to spend some time in reviewing the lack of competition among defense contractors and how ineffective it is, in many cases applying penalties when the procurement rules are ignored.

Mr. Chairman, I have many questions and, to be honest, many doubts. I believe that there is a genuine requirement for recapitalization, but I am not certain that the requirement must be addressed now. I believe that the Air Force does not have the funds to buy these planes directly. But I am not certain the Air Force will ever be in a position to buy these planes in the near future, given its priorities.

I believe that we should encourage innovative business practices, but I am not certain that such practices should be utilized if it requires us to obligate future Congresses to this lease program.

I believe we must be judicious and deliberate as we proceed. We must make certain that this is the best deal, for more is at stake than the taxpayers' hard-earned dollars. Our national security could be put at risk as well.

Thank you, Mr. Chairman, for the opportunity to share some of my thoughts. I look forward to the testimony of our witnesses.

Chairman WARNER. Thank you very much, Senator Allard.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman. I just want to add my welcome and thanks to Secretary Roche and Secretary Wynne, as well as Director Kaplan, for being here this morning. I look forward to their testimony and want to add my welcome to you as we discuss the Air Force proposed tanker aircraft lease.

Thank you very much, Mr. Chairman.

Chairman WARNER. Thank you.

Senator Collins.

Senator COLLINS. Mr. Chairman, I am very eager to hear the testimony of our witnesses today, so I will withhold my opening comments.

Chairman WARNER. Senator Chambliss.

Senator CHAMBLISS. Mr. Chairman, thank you. No opening statement.

Chairman WARNER. Secretary Roche, you may proceed. I failed to state in my opening comments that I and my staff were not able to locate any historical reference to the Department of the Air Force having ever requested an authorization that addressed these critical needs with regard to tanker aircraft procurement. Perhaps in your statement or at some point in time you can supply the record with whether I am correct in that observation or there was at some point in time before this committee a request, either from the Defense Department or the President's Budget Office, in the annual message from the President, a request and/or a departmental request from the Air Force.

Thank you.

STATEMENT OF HON. JAMES G. ROCHE, SECRETARY OF THE AIR FORCE

Secretary ROCHE. Thank you, Mr. Chairman, Senator Levin, members of the committee. It is my great honor to join Secretary Mike Wynne and Mr. Joel Kaplan today to testify on our need to begin the modernization of our air refueling fleet.

The air refueling capability delivered by the airmen who fly, maintain, and support our KC–135s, of which we have 544, and our KC–10s, of which we have 59, is absolutely vital to our Nation. Mr. Chairman, I agree, my research says that the only request was for the KC–10s and that was in the late 1970s. There has not been one subsequent to that.

Chairman WARNER. Right, and that was granted by Congress.

Secretary ROCHE. Yes, it was, sir.

Chairman WARNER. I remember it very well. Thank you.

Secretary ROCHE. Air refueling tankers enable our entire joint force to protect our homeland, conduct combat operations, and provide humanitarian relief around the world. They enable Air Force, Navy, Marine Corps, and allied strike, electronic warfare, reconnaissance, and mobility aircraft to perform their missions. They have been essential in Operations Enduring Freedom and Iraqi Freedom, as well as in the skies over the United States.

As we recently demonstrated in the war on terrorism, the Air Force tanker fleet was a critical force enabler that allowed our coalition force to operate over distant battlefields. In Afghanistan, air refueling made joint operations in a distant, landlocked nation possible. In Iraq, our ground forces' overwhelming speed, firepower, and decisive maneuvering were enabled by air dominance over the entire country, a condition that was made possible through the thousands of air refueling sorties that moved the forces to the fight and kept reconnaissance and strike aircraft overhead 24 hours a day. Of our roughly 69,000 sorties to date in Operation Iraqi Freedom, close to 10,000 have been tanker aircraft.

I have with me today, Mr. Chairman, a couple of our airmen who have flown and worked on the maintenance of the KC–135s. Lieu-

tenant Colonel Smiedendorf and Colonel Westhoff are here should you have any questions of any of the pilots on that subject, sir.

This distinctive capability, our Nation's ability to rapidly project air, land, and sea forces around the globe, is critical to our Nation's ability to deter enemies, assure our friends and allies, project force, and, when necessary, win our wars. In short, Mr. Chairman, our national security strategy cannot be executed without aerial refueling tankers. This dependence and the advanced age of the Nation's air refueling aircraft fleet drive our urgency to recapitalize.

The ongoing global effort to fight terror heightens our aging aircraft concerns, particularly because of the need to protect our Nation's skies with fighters, requiring our tanker capability, as well as the need to maintain our global reach capability.

Chairman WARNER. Secretary Roche, I am going to interrupt. We will admit for the record the full statements of all witnesses.

Secretary ROCHE. All right, sir.

To the point of Operation Noble Eagle, we keep a number of aircraft, tankers, on alert every day, around the clock. Today, the on-average 42-year-plus old KC–135 represents 90 percent of our combat air refueling capability or about 82 percent of our capacity. The 544 KC–135s on duty today have the oldest average age of any of our aircraft combat aircraft, and the E model, the 131 aircraft we are choosing to replace with this lease, are now 44 years old on average.

Our 135s in general, Mr. Chairman, are older than the average age of Navy oilers, which is roughly 40 years, I am told.

During Operation Iraqi Freedom, we severely restricted the deployment of these aircraft due to operational limitations—the E models I am referring to. They were unsuited for the high temperatures and short runways in the operating area and they had insufficient fuel capacity and less efficient engines. Instead, we limited their use to the European theater in order to support the air bridge and global power operations, and the commander of the Air Mobility Command made the point to me that we only used them at three hubs where there were a lot of spare parts and support for aircraft of this age.

While demand for these assets is increasing, the data show their availability steadily decreasing, while the costs to keep them flying are swelling. In the last 12 years, mission capable rates are down 7 percent, program depot maintenance costs tripled, depot work packages doubled, and the depot flow days more than doubled, primarily due to the challenges posed by aircraft aging.

Just to correct fatigue and corrosion problems in the KC–135E engine struts will cost over $3 million per aircraft. If these repairs are not done, the fleet will be grounded. Both General Jumper and I have visited the depot where much of this work is being done. I can tell you that the men and women who are keeping these planes flying are performing magnificently, but they are doing much more than our Nation should reasonably expect of them.

I would also point out proudly, sir, that the Air Logistics Center (ALC) at Tinker Air Force Base has by virtue of benchmarking with other ALCs and with commercial firms, is now judged to be more productive than the two commercial firms that are also overhauling 135s, and we would expect by benchmarking the commer-

cial firms will come up. But it is an example of where a Government-owned institution can perform very well.

Across the Air Force, we are now migrating dollars from procurement to operation and sustainment accounts to sustain our aging fleets. In 1997, the direct cost of corrosion maintenance for all U.S. aircraft was $795 million. Today we estimate it will cost over $1 billion a year, despite a 5-percent reduction in aircraft inventory over the same period of time. Currently, roughly 30 percent of the depot hours for our 135s are dedicated to fixing corrosion, and we expect over the next 4 years for that to increase.

Given the value of air refueling tankers to our Nation's security, the operational risks of flying these aged aircraft, and the spiral costs to operate and sustain this fleet, we believe there is a compelling set of circumstances that demand we begin recapitalizing our Nation's tanker force. After a comprehensive and deliberate review that validated the urgent need to start modernizing our tankers now and the advantages of leasing, we urge your support for our proposal to enter into a multi-year lease of 100 KC–767 tanker aircraft.

Even if we were to begin this, Mr. Chairman, we will still have KC–135s that will be flying well into their 70s. So we will have to maintain these other aircraft over a very long period of time.

The dominant reason for proposing a lease is the advantage it affords for quickly delivering needed tankers to our warfighters without requiring significant up-front funding. This will hedge the risk to the force of KC–135s across the board.

I want to assure both you and your colleagues that we looked at several alternatives to our tanker needs. We seriously evaluated a tanker offering from Airbus and we took a hard look at re-engining the KC–135s. The fact is we could spend billions to put new engines on an old airframe, but still not stem the corrosion and structural challenges we face in the main body of the aircraft.

We looked at stored commercial aircraft that would be suitable, the 767–ER200. There were very few of them because they are the choice of freighters, people who do air freight work. Those that were in storage had an extraordinary number of hours on them.

We looked at fee for service, which is something Navy has looked at as well, and it is not suitable for our fleet given our projection forces. We looked at designing a new aircraft and realized that would be extraordinarily expensive to do, as any new program has done. So we conducted a request for information to both of the manufacturers, Airbus as well as Boeing.

Mr. Chairman, we recognize that this lease will cost marginally more from a net present value analysis than a normal procurement program. But in the Department's view the immediate and long-term benefits, including operational savings which are not included in the calculations, greatly offset the differentiated costs of the lease option. By operational savings, Mr. Chairman, I mean if you use this aircraft you do not have to use a lot of others. You get savings as you go.

So for instance, if we had to maintain a combat air patrol (CAP) somewhere that consisted of Navy aircraft as well as Air Force aircraft, or that consisted of coalition aircraft, we now would require three KC–135s. In the case of the 767 tanker, it would only be one.

If we were to move Marine Corps aircraft from Cherry Point over to Japan, we would use half the pounds of fuel, using the newer aircraft than existing aircraft because they also can carry cargo.

So there are savings as you go. We did not project any of those because you cannot tell how often you would do that and therefore we felt it would not be part of the analysis. But it is one of those things that we would benefit from if they were in place.

Our report shows, as has been discussed, that we can lease and deliver 100 767 tankers 5 years sooner than we can under a normal procurement program. Most significant, to purchase these aircraft on the same schedule we would need $5 billion in additional funding in the Air Force account through fiscal years 2006 and more than $11 to $14 billion more across the Future Year Defense Program (FYDP). This is money the Air Force does not have and is not programmed for and will result in significant impacts and delays to our other modernization programs.

We agree that in the past this should have been addressed and allowing the tankers to get to the age they are without addressing a recapitalization program was wrong.

There are a number of safeguards, we believe, in the leasing program which can be discussed. For instance, part of our proposed contract, the third party trust, will buy the aircraft from Boeing and will lease them to the government. The trust will not make a profit, but will provide for the funds necessary to pay bondholders and pay off the debt after the sale of the aircraft.

At yesterday's Commerce Committee hearing I was in error. I said that the trustee was the Air Force. The trustee is not the Air Force. The administrator of the trust is an employee of the Wilmington Trust Company, not Boeing nor the Air Force.

Further, any residual funds acquired from a possible sale of any aircraft subsequent to the termination would be refunded to the government as an overpayment.

We have also insisted, and Boeing has agreed, that the contract will include most favored customer clauses stating that if Boeing sells comparable aircraft during the term of the contract for a lesser price the government will receive an equitable adjustment.

To further guarantee the taxpayers receive a favorable deal, Boeing has agreed to a return on sales cap of 15 percent, whereby any return on sales in excess of 15 percent in either commercial or military manufacturing centers will be returned to the government. This is something unprecedented in military acquisitions and we believe is a way to account for the different models and different estimates. If we are wrong and in fact the planes are cheaper, this provision allows money to be returned to the government because it will be audited and it will be audited annually.

Thus, I am pleased to report to the committee that, through the combined efforts of the OMB and the Office of Secretary of Defense and, honestly, Congress, we arrived at what I can characterize as a good deal for the Air Force and the American people. In addition to the business considerations that make this approach attractive, there are compelling operational benefits to the KC–767. It can offload 20 percent more fuel. It can use many more runways, and it can refuel itself as well as pass fuel. Therefore it can be used for consolidation like the KC–10, which has proved so valuable to us.

Mr. Chairman, as I note in my written testimony to this committee, our proposal for using commercial airline bodies as tanker platforms is not without precedent. In the late 1970s, Secretary of Defense Harold Brown arranged to begin to acquire DC–10 aircraft converted into tankers. Secretary Weinberger continued this program. The DC–10, like the Boeing 767 today, was nearing the end of its production run. The airliner had been designed and proven successful as a platform, the result of billions of dollars by the contractor, not the taxpayer.

In hindsight, the success of the KC–10 fleet, with 59 of 60 still in the inventory, proves the wisdom of Secretary Brown's approach. Even though the KC–135 fleet at that time was only 16 to 18 years old, they believed they needed a hedge.

We hope you will agree with us that this innovative new way of delivering capability is as compelling today as it was to Secretaries Brown and Weinberger 20-plus years ago. I would point out, Mr. Chairman, that in Operation Iraqi Freedom we made use of 80 percent of our KC–10s, 50 percent of our R model 135s, but only 25 percent of the E models.

Mr. Chairman, America's Air Force is able to perform the extraordinary feats asked of us because we are blessed with the full support of the American people, Congress, and the President of the United States. I join my colleagues here today in urging your support for this proposal.

I also would like to tell you, Senator, that my good colleague our new Vice Chief of the Air Force General Buz Moseley is here. He was the coalition forces combined air component commander, and if there are any questions about the use of tankers in the recent conflict he would be glad to address them.

So on behalf of General Jumper, we thank you for the investment you have made in our future and trust that you have placed in us. Thank you, sir.

[The prepared statement of Secretary Roche follows:]

PREPARED STATEMENT BY HON. JAMES G. ROCHE

Thank you for the opportunity to appear before you today to discuss the necessity of the Air Force's tanker lease proposal and the status of the KC–135 fleet. In my testimony I will outline the importance of the Air Force's tanker fleet to this Nation's security, the status of that fleet, the proposals that were before us, and finally, our choice of the tanker lease proposal which best serves this Nation's security interests, the American public's interests, and the operational needs of the Air Force and our warfighting combatant commanders.

Before I begin, I must commend the men and women who fly, maintain, and deliver the impressive combat capability that is our topic today. Without these incredibly talented uniformed and civilian airmen, this discussion would be irrelevant. These airmen, the heart of our air refueling force, operate everyday all over the globe. From active duty and our Reserve component units, we draw our vital tanker capabilities from places like Selfridge, Michigan; Phoenix, Arizona; Altus, Oklahoma; Forbes, Kansas; Birmingham, Alabama; Honolulu, Hawaii; Bangor, Maine; Tampa, Florida; Lincoln, Nebraska; Warner-Robins, Georgia; Grissom, Indiana; Niagara, New York; and Goldsboro, North Carolina.

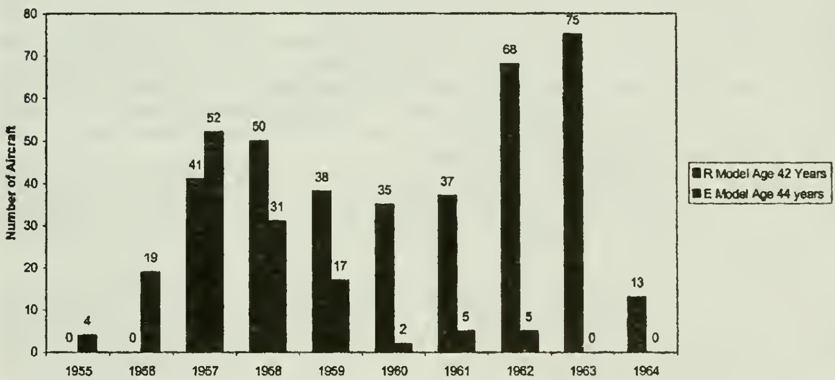
During the past 2 years, these airmen and our tanker fleet have been tested hard, flying Operation Noble Eagle (Homeland Defense), Operation Enduring Freedom (Afghanistan), and Operation Iraqi Freedom (Iraq). They delivered far more than could reasonably be expected while operating and maintaining the oldest fleet in the United States Air Force inventory.

CURRENT STATUS OF FLEET

Tanker dependence in recent wars and the advanced age of the Nation's air refueling aircraft fleet drive the Air Force's urgency to recapitalize as soon as possible. Today, a single 44-year-old aircraft type, the KC–135, supports 82 percent of our combat air refueling capability. Beginning manufacture under the Eisenhower administration, 732 KC–135s entered military service between 1957 and 1965. The remaining 544 KC–135s on duty today have the oldest average fleet age of any Air Force combat aircraft, and the "E" model (131) is 44 years old on average. It is the old KC–135Es we seek to replace soonest. The ongoing war on terrorism heightens our concerns regarding these aging aircraft. Our new "steady state" includes tankers supporting fighters defending the homeland as well as the need to maintain the Nation's global reach capability.

Aircraft life can be measured in three ways—usage (flight hours), physical age (years), and utility (usefulness). The KC–135's physical age is the driving need to recapitalize. Through the 1990s, the KC–135 fleet started to show its age. In 1991, Air Force Materiel Command initiated aging aircraft inspections and repairs to maintain the airworthiness of this legacy fleet. By 2000, 32 percent of the KC–135 fleet (a significant portion of this Nation's overall Air Force refueling capability) was unavailable due to programmed depot level maintenance as the number and complexity of repairs drastically increased. This reduced the refueling capability to our warfighters and caused a backlog at the depot facilities, as the average number of days in depot-level maintenance peaked at over 400 days.

KC-135 Aircraft Age



Annual depot price per aircraft grew significantly as the fleet availability decreased. The combination of increasing costs and decreasing availability projected into the future compels the Air Force to act now to balance cost, capability, and risk; it compels us to begin recapitalization of the KC–135 fleet.

Although General John Jumper, our Chief of Staff, and I have visited the depot at Tinker Air Force Base to investigate the condition of our KC–135s, we do not rely on our observations or anecdotal evidence alone. Independent teams, including teams from Office of the Secretary of Defense, the GAO, and many others, that have visited the KC–135 depot maintenance line at Tinker Air Force Base unanimously recognized the risk that this 44-year-old aircraft could encounter a fleet-grounding event, negatively impacting combat operations across all services and coalition partners.

It should be noted that aircraft corrosion is a significant concern for aging aircraft, both military and civilian. Congress enacted the Aging Aircraft Safety Act, Title IV of Public Law 102–143, in October of 1991 after the in-flight structural damage of a Hawaiian Airlines 737 in April 1988. As you may remember, corrosion had so weakened the fuselage of the aircraft that it burst when it reached altitude and could not sustain the pressure differential between the pressurized cabin and the atmosphere outside. The Federal Aviation Administration has enacted additional rules regarding corrosion and inspections for corrosion since it is of such critical concern for aging aircraft.

The KC–135E fleet—our oldest—is beset with problems that adversely impact its utility to the Air Force, our sister services, and our friends and allies. The planes are operating under flight restrictions pending interim repair of an engine strut—interim repair costs $150,000 per aircraft, must be complete by September 2004. If the repairs are not made at that time, the unrepaired aircraft must be grounded. The interim repair will only last for 5 years at which time the permanent repair must be made. Permanent repair of the engine strut would cost $2.9 million per aircraft. If the permanent repairs are not made, the unrepaired aircraft in that case must also be grounded. We are facing a continual set of repairs and maintenance actions that only delay that event. There is also the KC–135 fuel system, which requires repair to deteriorating internal corrosion barriers. Those repairs are estimated to cost $500,000 per aircraft. Of course, there are always the "unknown unknowns" which become much more prevalent in aging hardware—for example, 40 percent of the KC–135 fleet was non-mission capable from September 1999 to February 2000 as a result of a requirement to replace the horizontal stabilizer trim actuator—an unexpected event that grounded a major portion of our fleet.

REQUIREMENT FOR RECAPITALIZATION

The cost of continuing to operate the existing KC–135 air refueling force will continue to escalate dramatically. Corrosion, major structural repairs, and an increased rate of inspection are major drivers for increased cost and time spent in depot. More time in the depot directly decreases operational aircraft availability. Operational availability is expected to continue to decrease throughout the remainder of the KC–135's lifespan. Under these conditions of increasing costs and steadily declining availability and performance, combined with the increasing operational demands, actions to replace the KC–135 must begin now.

Our proposal—using commercial airline bodies as tanker platforms—is not without precedent. In the late 1970s, Secretary of Defense Harold Brown began to buy DC–10 aircraft converted into tankers, and Secretary Weinberger continued the program, resulting in the 60 KC–10s that ultimately became our lifeblood. The airplane had been designed and proven successful as a platform, the result of investment by the contractor, not the taxpayer. In hindsight, the success of the KC–10 fleet (59 of 60 are still in the inventory) proves the wisdom of Secretaries Brown and Weinberger's decision to buy commercially developed aircraft, even though the KC–135 fleet at that time was only 16 to 18 years old.

In the case of the KC–135, military aircraft was specially developed for the Air Force. From this model the industry created the commercial carrier, the B–707. These commercial airplanes have been retired for the most part in favor of newer airplanes. In this case, it was the contractor who benefited from the investment made by the Air Force.

You will recall that we capitalized the original 732 KC–135s at a rate of 90 aircraft per year. To recapitalize the 544 that remain at an economical but affordable rate could take more than 30 years. We may already be behind the power curve. We can no longer accept the risk of these venerable aircraft continuing their age-induced death spiral without taking immediate action. A realistic replacement program will take decades to recapitalize a fleet of this size. Even beginning today, some of our KC–135s will pass their 70th birthday before they retire.

OPERATIONAL NEED FOR TANKERS

We do not propose leasing tankers as a bailout for Boeing or any other aircraft manufacturer. We propose leasing tankers because we need tankers to fight our Nation's wars, and we do not believe we should take the risk to wait for years before we begin.

The Air Force tanker fleet delivered over 375 million pounds of fuel during 30 days of Operation Iraqi Freedom, 90 percent of the total fuel delivered by all joint and coalition forces. In addition, our tanker fleet participated in air bridge operations, long-range strike missions, and other global commitments during this time. This great feat allowed Air Force strike aircraft to put relentless pressure on the Iraqi leadership and the Iraqi armed forces. It was the key to 24-hour airborne surveillance. Aerial refueling was the reason that the Air Force could dedicate so many assets to on-call close air support, on-call strikes on time-sensitive targets, and on-call support for our highly successful special operations forces.

But more than just an Air Force asset, our tanker capability enables the combat capabilities that our sister services and coalition partners bring to the fight. For instance, tankers made it possible for Navy and Marine fighters to launch from carriers in the Persian Gulf and strike targets deep inside Iraq. Tankers permitted C–17s to take off from Italy and drop Army paratroopers in northern Iraq. United

States Air Force air refueling aircraft delivered over 90 percent of fuel offloaded to our sister services and allies during OIF. On a global scale, General John Handy and his folks at US Transportation Command managed the tanker air bridge throughout these campaigns, simultaneously sustaining our airlift to the theater while our combat forces continued to deter our enemies in the Pacific. Without these vital refuelings, troops and materiel that our Nation needed halfway around the world would have been less effective and slower to respond, jeopardizing our ability to project global land, sea, and air power.

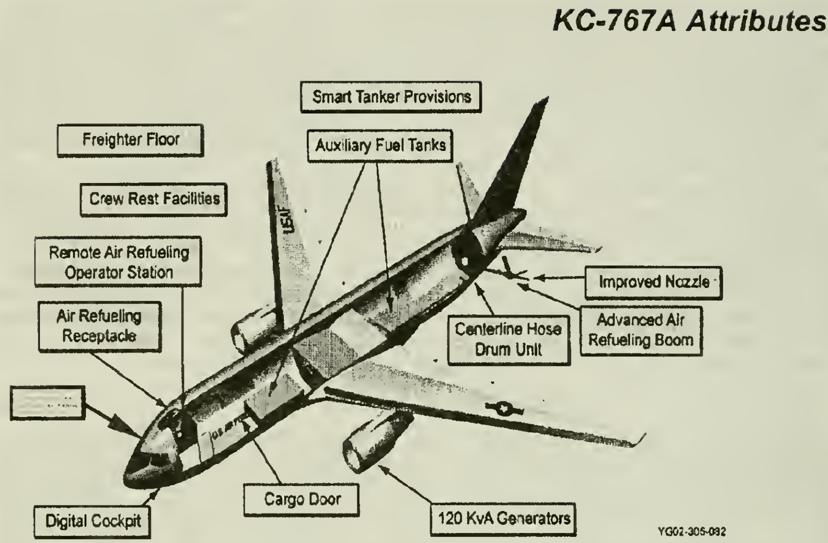
Air refueling tankers enable our entire force to protect our homeland, conduct combat operations, and provide humanitarian relief around the world. They enable other Air Force, Navy, Marine Corps and allied aircraft to fly farther, stay airborne longer, and carry more weapons, equipment, and supplies. As we just experienced in Operation Enduring Freedom and Operation Iraqi Freedom, the Air Force tanker was a critical force enabler and force multiplier that allowed our coalition force to operate over a distant battlefield. Air refueling tankers ensure our Nation has the global reach to respond quickly and decisively anywhere in the world. In short, our National Security Strategy is unexecutable without air refueling tankers.

NEED/UTILITY OF THESE TANKERS

But again, 90 percent of our current air refueling fleet rests in this single aged weapon system. In fact, the warfighter had to adapt his basing plan to address the limitations of the "E" model of the KC–135. During Operation Iraqi Freedom, the "E" models were deemed incapable of sustained operations in the area of responsibility (AOR) due to the high temperatures and shorter runway lengths in theater and the lower fuel capacity and less efficient engines of the "E" model. We found use for them in EUCOM locations during the war, but their support was limited to airbridge, homeland defense, and global power operations. The KC–767A, however, will truly enhance our warfighting flexibility. We will replace 131 KC–135Es with 100 KC–767As, and greatly increase our capabilities.

The KC–767A is a tanker version of the long-range commercial aircraft. This tanker was developed and commercially offered to the international community by the Boeing Company as the Global Tanker Transport Aircraft (GTTA). Italy was the first customer, ordering four aircraft, and has been followed by Japan. The KC–767 tanker will be the world's newest and most advanced tanker. It can offload 20 percent more fuel than the KC–135E, and unlike the E-model, but like the KC–10, can itself be refueled in flight. The KC–767 tanker also has the capability to refuel probe- and receptacle-equipped aircraft on every mission—an enormous benefit for joint operations. While the KC–767 will have roughly the same maximum fuel offload as the KC–135R, it can takeoff at maximum gross weight in approximately 3,500 ft. less runway—hence, along with greater operational capabilities, the KC–767A is able to operate from four times as many runways as the KC–135. As delivered, the KC–767A will be configured as a convertible freighter being able to carry all passengers (approximately 200) or all cargo (19 pallets vs. 6 on the KC–135).

It will have a digital cockpit, cargo door, auxiliary fuel tanks, remote air refueling boom operators station, centerline hose drum unit, crew rest facilities, larger 120 kilovolt-Ampere generators, advanced air refueling boom, and aeromedical evacuation capability.



ALTERNATIVES CONSIDERED

In selecting the KC–767A, the Air Force considered a variety of airframes and acquisition strategies. By DOD regulations, the Air Force was not required to conduct an analysis of alternatives (AOA) for the KC–767 tanker lease, the reasons for which I will address in more detail later. Even though the Air Force did not complete a formal AOA on the KC–767A, we performed several trade analyses to ensure the KC–767A was the right solution to meet the operational requirements.

Maintain current force structure: The Air Force first considered maintaining the current force structure. The damaging effects of aging quickly became apparent from KC–135 depot work. The unpredictable nature of age-related corrosion—its timing, location, and extent—increases our concern for the risk of an event that would ground the KC–135 fleet. Thus, continuing the status quo was rejected because of unpredictable and potentially calamitous operational mission impacts.

Re-engine: The Air Force also quickly recognized that re-engining the venerable KC–135Es did not address the aging issues, risks to our combat operations, or increasing costs. Re-engining would amount to spending billions of dollars for only a 20 percent improvement over KC–135E capability, but without addressing the “old iron” that needs replacing. Re-engining was not selected as the solution.

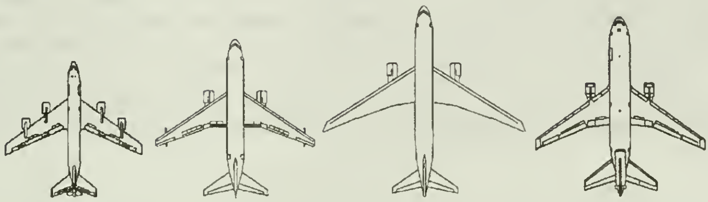
Commercial alternative: The Air Force considered acquisition of commercial derivative platforms in tanker configurations. This strategy acquires air refueling tankers derived from commercially available airframes to avoid the high costs of new aircraft research and development. The use of a commercial-based airframe forges synergy with industry in worldwide logistics networks and other support. The question then became: How can we get these mission critical assets to the warfighter in the most expeditious way, at a reasonable cost to taxpayers? Our answer: lease a tanker aircraft that is already commercially available.

In February 2002, the Air Force issued a request for information (RFI) to both Boeing and European Aeronautic Defense and Space Company (EADS) to evaluate available technologies and associated risks. Consideration of acquisition of commercially derived platforms included the B757, B767, B777, and the Airbus A330 in tanker configurations, considering both a lease option and a direct purchase. Based on the responses to the RFI, the Boeing 767 was found to be the most favorable. The Boeing 757 was too small to replace KC–135 one-for-one, and would drive additional manpower requirements on a tanker force that is already limited by available crews. The Boeing 777 required almost twice as much ramp space as a KC–135—more than a KC–10—but had a reduced fuel offload capability when compared to the KC–10. Further, the B777 required significant engineering analysis and design work to be modified into a tanker, including the possibility of a shortened fuselage to accommodate a refueling boom during takeoff. The Boeing 767 was selected over

EADS aircraft as a result of its favorable design, schedule, risk factors, and proven boom technology.

AIRCRAFT DIMENSION COMPARISON

	KC-135R	B767	A330	KC-10
Length:	136 ft 3 in	159 ft 2 in	191 ft 6 in	181 ft 7 in
Span:	130 ft 10 in	156 ft 1 in	197 ft 10 in	165 ft 4 in
Height:	41 ft 8 in	52 ft	58 ft 8 in	57 ft 10 in



	KC-135R	B767	A330	KC-10
Max Taxi Wgt:	322,500 lbs	396,000 lbs	509,042 lbs	593,000 lbs
Op. Empty Wgt:	123,000 lbs	194,000 lbs	252,890 lbs	237,000 lbs
Fuel @ Max Taxi:	199,500 lbs	202,000 lbs	248,185 lbs	356,000 lbs

To begin the recapitalization of the 544 KC–135 aircraft, the Air Force considered two primary alternatives as acquisition strategies—a traditional procurement of 100 KC–767A aircraft, and an operating lease of commercially derived air refueling tankers in accordance with section 8159 in fiscal year 2002 legislation. In addition, the Office of the Secretary of Defense Leasing Review Panel considered several alternate procurement approaches in contrast to the lease or planned purchase, including purchases on the same delivery schedule as the lease and applying the funding stream required for a lease to a more traditional purchase program. The Secretary of Defense determined that the lease option best satisfied this nation's military needs.

The Air Force, with permission from Congress, began negotiations with Boeing for an operating lease of 100 commercially developed KC–767A air refueling tankers. At the time of the fiscal year 2004 President's budget (PB) submittal, negotiations for the lease were unfinished. Plan A, a KC–X procurement program, was included in the President's fiscal year 2004 budget, with the program to begin, because of affordability constraints, in fiscal year 2006. This program in the fiscal year 2004 PB would deliver one tanker to the warfighter in fiscal year 2009. The 100th aircraft would be delivered in fiscal year 2016.

In contrast, under the negotiated lease, the contractor will deliver 60 new tankers to the warfighter by fiscal year 2009, and deliver all 100 by fiscal year 2011 which is 5 years sooner than the fiscal year 2004 PB procurement program. This plan provides for a quicker start to recapitalization of the tankers. To match such a recapitalization schedule under a purchase option would require billions of additional dollars to be invested during the FYDP as well as waivers of various acquisition rules. Since those funds are already committed to other uses, there would have to be significant restructuring and/or cancellation of ongoing and planned programs.

BUSINESS CASE ANALYSIS

Obviously, cost is a big driver when choosing an acquisition strategy. In isolation, a leasing strategy requires additional funds in then-year dollars relative to the cost of a traditional purchase. Economic considerations, however, are not limited to expected funding flows, which ignore the time-value of money. To account for this time-value of money and gain insight into the economic implications of leasing as an acquisition strategy, Office of Management and Budget Circular (OMB) A–94 directs a present value comparison between the proposed lease and a hypothetical purchase based on the same delivery/return profile. The financial analysis for the A–94 test is highly sensitive to the underlying assumptions such as purchase price, expected inflation and appropriate discount rate. Since OMB oversees governmental leases, the A–94 analysis, and the defining requirements for an operating lease, the Air Force consulted them in developing its analytic assumptions. Applying the A–

94 test the Air Force determined that the net present value of the multiyear lease option and a traditional purchase option results in a net present value difference favoring a purchase by $150 million—about 1 percent of the total cost. These calculations do not take into account any operational savings which the lease would permit to accrue sooner.

The advantages in schedule and reduced impact to currently budgeted programs outweighed the results of the A–94 analysis and drove the leasing decision. The Air Force and Department of Defense selected leasing as the acquisition strategy primarily based on affordability—by reducing the near-term cost—and minimizing the budgetary impact to our plans for getting accelerated capability of the new weapon system to our frontline troops.

Under the lease option, the Air Force can afford to field this new fleet of tankers at a quicker pace than under a traditional purchase plan. Jumpstarting replacement of the older, less-capable tankers enables faster modernization of air expeditionary forces. The lease not only advances the first delivery by 3 years, *it puts the 100 aircraft fleet at the disposal of our frontline commanders for combat operations by fiscal year 2011, 5 years ahead of the planned purchase.* If we were to purchase these aircraft in a traditional buy on the same delivery schedule, while maintaining our financial top-line, we would have to take billions of dollars out of other important programs.

IMPLEMENTATION PLANS

Under this pilot program, the Air Force intends to lease 100 KC–767A aircraft with congressional approval of the new start notification. The lease program will be sole source, using terms and conditions germane to commercial aircraft leases and commercial business practices in accordance with the Federal Acquisition Regulation and section 8159. Terms and conditions of the lease arrangement meet all requirements of the fiscal year 2002 Defense Appropriations Act including OMB Circular A–11 criteria for an operating lease. Full details of the lease are included in the Report to the Congressional Defense Committees.

This will be a three-party contract between the U.S. Government, Boeing Integrated Defense Systems, and a third-party Trust, the KC–767A USAF Tanker Statutory Trust. The Trust will issue bonds on the commercial market based on the strength of the lease contract with the U.S. Government (rather than the credit worthiness of Boeing), will buy the aircraft from Boeing, and will lease them to the Government. The Trust will not make a profit but will provide for the funds necessary to pay bondholders and pay off the debt after the sale of the aircraft. Any residual funds acquired from the possible sale of the aircraft subsequent to lease termination will be refunded to the Government as an overpayment.

The contract will include "most favored customer" clauses stating that if Boeing sells comparable aircraft (up to 100) during the term of the contract for a lesser price, the Government will receive an equitable adjustment. Besides being a fixed-price contract, and to further guarantee the taxpayers receive a favorable deal, Boeing has agreed to a return-on-sales (ROS) cap of 15 percent, whereby in 2011, any ROS in excess of 15 percent in either commercial or military manufacturing centers will be returned to the Government. Again, this is something unprecedented in military acquisitions.

It is not unexpected that new ways of doing business might raise questions or controversies. There have been several questions with respect to this arrangement that I would like to address.

Analysis of alternatives: As stated earlier, the Air Force was not required to conduct an AOA for the KC–767 tanker lease. There is no statutory requirement to conduct an AOA. Regulatory requirements for AOAs are contained in our DOD instruction, *Operation of the Defense Acquisition System,* which provides for their flexible application. Under "Plan A," an AOA was planned to complement the work done under the Tanker Requirements Study and the Economics Service Life Study, to lead to a traditional purchase beginning with the delivery of one aircraft by 2009. However, the operational requirements of the global war on terror and the increased demand on the tanker fleet highlighted the need to accelerate the recapitalization of this national asset. "Plan B," this lease program, addressed the critical need the Congress and we saw for jump-starting recapitalization and it made good business sense.

In fact, it is not unusual for a major program to not conduct an AOA. The GAO has previously stated (NSIAD–94–194), "Applicable defense acquisition regulations allow management discretion in these matters for the purpose of minimizing development time and reducing costs." There is additional precedence for not completing an AOA when either the item is a commercial product or there is a low-risk in deliv-

ering a product that will be militarily useful. The Air Force did not complete an AOA for the C–130J program since this was an acquisition of a commercial product that had already been marketed to foreign customers—similar to the KC–767A tanker. No AOAs were conducted for programs such as the KC–10 or the F/A–18 E/F.

Even though the Air Force did not complete a formal AOA on the KC–767A, we performed several trade analyses to ensure the KC–767A was the right solution to the operational requirements. We looked at maintaining the status quo, but we judged the risk too high to not begin the recapitalization effort now as a result of September 11, increased tanker operations tempo for homeland defense and Operation Enduring Freedom, increased operations and support costs and risks of an aging fleet (catastrophic/grounding event that would significantly erode our ability to meet our mission). We evaluated the feasibility of re-engining KC–135Es, but this does not reduce the aging aircraft risk—we would still have old aircraft that will need to be recapitalized, and the payback of the re-engining cost AND retirement savings [if we were allowed to retire 31 KC–135Es] exceeds 11 years. We researched using "stored" commercial aircraft, but all the aircraft had high hours, different engines, required heavy modifications and there were insufficient numbers of aircraft available to be cost effective. We investigated using a commercial fee-for-service, but while this has been successful in Navy training scenarios, it did not meet our overall operational requirements. We looked at other operational commercial platforms to include an Airbus 330, Boeing 757, and Boeing 777. The Airbus 330 had significant technical risk with integrating boom technology into the aircraft. The B–757 could not carry enough fuel to make it an efficient tanker. The B–777 was too large, reducing the airfields where the aircraft could be deployed. Finally, we researched the feasibility of building a new tanker from the ground up, but this alternative carries a much higher cost and developmental risk, and would not be available within the timeframe the KC–767As would be delivered. The decision to select Boeing was based on Boeing's response to our RFI, including its favorable design, schedule, risk factors, and boom technology.

WHY WE NEED TANKERS SO URGENTLY DESPITE THE 2001 ECONOMIC SERVICE LIFE STUDY (ESLS) REPORT THAT INTIMATED THAT THE CURRENT FLEET WOULD LAST UNTIL 2040

Much has been made about the ESLS's prediction that we could operate the current tanker fleet until 2040. What is rarely mentioned is that even the optimistic 2001 study predicted that operations and sustainment (O&S) costs would increase 43 percent by 2040 with 15 percent decrease in availability. The study assumed only 1 percent/year cost growth, but even in as little time as 18 months, that figure was seen as flawed. The updated report raised that figure to 1.5 percent/year. The study was based on statistical calculations, but actual depot sales rates show much greater increases in O&S costs. There have been several studies regarding the aging aircraft.

1995 Fatigue Life Study: Boeing and the C/KC–135 SPO continued their evaluation of the KC–135 expected service life with a fatigue analysis in 1995. This analysis indicated that the KC–135R fleet would not exhibit significant fatigue damage, in the absence of corrosion or widespread fatigue damage, until 70,000 flight hours (66,000 for the KC–135E).

The Air Force and industry debate over the unknown effects of corrosion on fatigue life prompted the C/KC–135 SPO to contract with Boeing to update the fatigue life to include effects of increased stress from corrosion-associated material thinning. Using this combined "net-area" fatigue/corrosion life, the KC–135R service life was adjusted to 39,000 flight hours and the KC–135E life was adjusted to 36,000 hours. Today, the average flight-hour distribution for R models is 16,000–17,000 hours, and 17,000–19,000 hours for the E models. An Air Force/industry "Blue Ribbon Panel" convened in 1996 and acknowledged operation of the fleet out to 2040 is achievable, assuming aggressive corrosion control. Further analysis would conclude that the KC–135 service life is actually limited by age in years, not flight hours.

As early as the Air Mobility Master Plan of 1995, Air Mobility Command (AMC) acknowledged corrosion as a "major factor in the continued service life of the KC–135 forces." At that time, AMC pursued corrosion forecasting technologies and planned on initiating replacement of the KC–135 fleet in fiscal year 2007 pending verification of the magnitude of the corrosion problem. The 1998 Air Mobility Master Plan again noted that corrosion studies were required with a notional replacement date of fiscal year 2013. However, as more and more of these inspections took place, it was obvious by 2001, that our reports may have been overly optimistic. In

Air Force studies conducted in 2001 we proposed a notional replacement date of fiscal year 2010.

The depot level maintenance cost growth experienced due to the aggressive maintenance practices implemented with the Aging Aircraft Program caused concern within AMC. The Mobility Master Plan of 2000 called into question the high cost required to maintain the aging KC–135 fleet. The plan states, "The major factor limiting structural life is fleet corrosion. Previous studies did not include corrosion as a significant factor in the service life, nor did they address increased costs and decreased availability that would result from the aggressive maintenance practices required to maintain adequate safety margins." Consequently, previous service life estimates and projected retirement dates may be overly optimistic.

1994–1995 RAND studies: The Air Force contracted RAND to conduct aging aircraft studies based on commercial and military aircraft fleets in order to determine the feasibility of long-term sustainability of the Air Force's aging fleets. RAND completed a series of five studies beginning in 1994 and ending in 1999. These studies raised technical concerns regarding the 1) viability of retaining commercial aircraft past their design lives, 2) viability of retaining Air Force aircraft past their design lives, 3) potential maintenance cost growth associated with aging aircraft, 4) potential engine cost growth, and 5) projection of Air Force fleet-specific Program Depot Maintenance (PDM) and engine cost growth through 2022. The results of the studies concluded that "major support challenges may result from corrosion, insulation cracking, composite delamination, and other material degradation processes for which there are no scientific aging models or relevant historical experience. Most important, many of the challenges associated with aging material have emerged with little or no warning. This raises the concern that a new challenge may suddenly jeopardize an entire fleet's flight safety." The final study recommended a three-pronged strategy for maintaining aging aircraft: 1) risk management strategy to identify age-related hazards that affect cost and safety hazards and develop solutions to reduce their effects, 2) fleet contingency strategy to reduce aircraft design and production lead times of obsolete replacement parts to minimize fleet-wide failures, and 3) mission management strategy to implement acquisition and retirement plans that balance fleet ages within mission areas, making the Air Force less dependent upon a particular fleet of aging aircraft.

The Air Force has implemented two out of three prongs of RAND's strategy for maintaining aging aircraft. The C/KC–135 SPO's Aging Aircraft Program created a risk management strategy by establishing major structural repairs and tracking their repair. The SPO also developed fleet contingency strategies by contracting with new vendors for obsolete parts. The Air Force partially implemented a mission management strategy with the acquisition of the KC–10s; however, 90 percent of the refueling fleet still resides within the KC–135 fleet, creating the potential for fleet-wide system failure. At least partial recapitalization of the KC–135 fleet is needed to satisfy all of RAND's recommendations.

1996 GAO study: The GAO drafted this report in 1996 to validate Air Force actions to preserve its aging tanker fleet and to examine the effects of increased demands on the services' air refueling fleets after Operation Desert Storm. The study noted that "the Air Force's principal tanker aircraft—the KC–135s—are 30 to 40 years old and, as a result, are taking progressively more time and money to maintain and operate." The results of the study noted, "Air Mobility Command doubts that the KC–135 can be economically operated beyond 2020." This is the result of projected cost-per-flying-hour increases of 24 percent from 1996 to 2001, and historical depot labor hour increases of 36 percent, and depot flow day (aircraft time spent in depot) increases of 55 percent from 1991 to 1995. The study recommends recapitalizing the air refueling fleet with a "dual-use replacement aircraft (that) could fulfill both airlift and air refueling missions."

NEGOTIATED PRICE

The Air Force negotiated this agreement at the highest levels possible. We employed standard commercial "best" business practices as we negotiated the deal. We firmly believe that the Air Force price is the best price—the best price that can be achieved in the commercial market place in the real world. The difference is primarily one of assumptions. The Air Force treated the tanker lease as a commercial item. The Air Force followed the guidance for buying commercial items contained in Federal Acquisition Regulation (FAR) Part 12. In addition, Section 8159 of the fiscal year 2002 DOD Appropriations Act specifically authorized the Air Force to use terms and conditions that are customary in non-Government leases. The final price is a product of a careful analysis and market research by the Air Force and extensive price negotiations with the contractor. We believe the Air Force has received

a fair and reasonable price under the lease. However, we are not relying solely on our price analysis. The lease agreement contains most favored customer provisions and a 15-percent limitation on the contractor's total return on sale for the tankers. In addition, the contractor bears the risk of delivering conforming aircraft at a fixed price.

Also, the aircraft price must be viewed in a larger context. The aircraft must meet the performance specifications stated in the contract and must have a high [80 percent] operational availability rate. The contractor must maintain the aircraft to the specifications and the high (80 percent) availability rate throughout the term of the lease.

In contrast, the study conducted by IDA used a different basis of estimate; they looked at the manufacturing process used, associated development costs, risk management, and contract type. Nonetheless, the Air Force capitalized on much of the additional information derived through the review by the Office of the Secretary of Defense in our final negotiations.

PROGRAMMED RETIREMENTS

Our plan to retire 68 KC–135Es in fiscal year 2004 will increase fleet utilization by freeing money and personnel that would be required for maintaining KC–135Es that could be used on KC–135Rs. This is true even if we do not lease the 767. This retirement of 13 percent of the fleet would result in only 4 to 5 percent decrease in average sortie generation. If we only retire 12 aircraft in fiscal year 2004 versus going with the original 68-reduction plan, we would need approximately $40 million fiscal year 2004 dollars to cover the additional costs of keeping the Es around. This is based on 3 additional programmed depot maintenance requirements at approximately $8 million a piece and 13 additional engine overhaul requirements at $962,000 a piece. Additionally, we will need to replace $75 million in funds offset in fiscal year 2004 to divest 44 tankers. This includes flying hours and military personnel costs. The total bill in summary: added depot purchased equipment maintenance costs plus fiscal year 2004 offset, $40 million + $75 million = $115 million. The "retire 12 in fiscal year 2004" plan has no monetary impact on the "68-reduction" plan in fiscal year 2005 and fiscal year 2006, assuming that we use fiscal year 2005 to "catch up" on aircraft retirements, but may require some operational workaround to account for the rapid retirement.

CONCLUSION

I want to thank the committee for allowing the Air Force to share its concerns about the need for a new tanker. I believe the KC–767A Multi-Year Aircraft Lease Pilot Program offers us the opportunity to jumpstart recapitalization of our aging KC–135 tankers. Recent events and increased requirements to support homeland defense have spotlighted our reliance on these critical refueling assets. Tanker dependence in recent wars and the advanced age of the Nation's air refueling aircraft fleet drive the Air Force's urgency to begin recapitalization as soon as possible. The KC–767A supports the requirements for our next generation tanker aircraft. The negotiated lease proposal would provide for the delivery of 60 aircraft within the FYDP and field the 100th aircraft by 2011, 5 years faster than current purchase plans. This minimizes near-term budgetary impact to other important programs.

I fully support this leasing alternative to provide the warfighters with new equipment as quickly as possible. This leasing program supports the Air Force's essential mission requirements that support the defense of America.

I appreciate the support provided by Congress and look forward to working with this committee to best satisfy our warfighter needs in the future. Thank you for the opportunity to provide this statement for the record.

Chairman WARNER. Secretary Wynne.

STATEMENT OF HON. MICHAEL W. WYNNE, ACTING UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS

Secretary WYNNE. Mr. Chairman, Senator Levin, members of the committee: I am pleased to come before you today to talk about the Air Force's new start request to lease 100 KC–767 air refueling tanker aircraft. There is consensus within the Department that we must start recapitalizing the airborne tanker fleet as soon as pos-

sible. It is a vital component to our defense capability and it is aging badly.

Re-engining the KC–135E aircraft may not be sufficient to extend their service life. Options included an aircraft incorporating a new design or a variant of an existing aircraft. An aircraft based on a new design would cost the Department research and development funds and some estimates are that such a new aircraft would cost in the range of $200 million to $250 million a unit, while the planned commercial derivative, if it was available at the time, was estimated to cost between $150 million to $161 million.

There are only four suppliers that I consider as capable to develop and produce such a tanker aircraft. That would be Boeing, Lockheed Martin, European Air Defense Systems, and the Russians. Only three currently produce wide-body aircraft.

The Department's plan in the President's fiscal year 2004 budget was to begin a tanker development program or commercial derivative in fiscal year 2006, with the first tanker delivery targeted for fiscal year 2009. However, when Congress gave us the opportunity in this pilot program authority to lease, this allowed the Department to aggressively pursue the tanker version of the 767 aircraft, an option which might not have been available in the fiscal year 2006 should Boeing have been unable to maintain the commercial production line due to no current market.

On its face, this is clearly a less expensive alternative than new development. It has far less cost risk than waiting until fiscal year 2006 when the same commercial opportunity might no longer exist.

The Air Force proposed leasing tankers and brought their proposal to the Leasing Review Panel, which compared the merits and shortcomings of both leasing and purchasing KC–767 aircraft. Based on input from the co-chairs of this panel, Under Secretary Aldridge and Under Secretary Zakheim, the Secretary has determined that the lease option best met the needs of the Air Force and was preferable because leasing minimizes the near-term cost to the Department of Defense and delivers these aircraft sooner, gaining those benefits.

If we were to purchase the aircraft and Boeing were to deliver them on the same schedule as it will under the lease, it would require billions of dollars more in the FYDP. As we have pursued a goal of stability in programs and that was fostered by our goals that we set out in the acquisitions, technology, and logistics (AT&L), such a reallocation would have been counter to our goals and disrupted many ongoing programs, barring further appropriation of needed funds.

While the proposed lease will provide for delivery of a total of 100 KC–767s, approximately 60 of which will be delivered in the period covered by our Fiscal Year Defense Plan, fiscal year 2005 to 2009, the Department does intend to go further and recapitalize the airborne tanker fleet. The Air Force has thus been directed to develop a long-range recapitalization plan beyond the current lease proposal, and we will address that plan in the President's fiscal year 2006 budget.

At my request, the Department of Defense Inspector General (DODIG) has recently completed an evaluation of the process by which the Department arrived at the decision to lease tankers from

Boeing. The results of this evaluation frankly have provided insight as to how to strengthen the leasing panel's deliberation. During a review, the DODIG indicated there were no impediments that they were currently aware of to entering this lease agreement. I intend to carefully consider all the recommendations from this report as future lease opportunities come before this panel.

I do recall in the mid-1970s the lease of maritime prepositioning ships that your staff may go see. They are still on station. It was a long-term, 25-year lease, as I recall, to build, operate, and charter. It is a dim memory of mine, because I happened to be with the corporation that did that, but you might look into that, sir.

Chairman WARNER. I remember the precedent quite well.

Secretary WYNNE. Thank you, Mr. Chairman, for the opportunity to testify before this committee. I urge this committee to approve this lease and the replacement plan it represents. I stand ready to answer any questions that you and the members of the committee might have.

Thank you, sir.

[The prepared statement of Secretary Wynne follows:]

PREPARED STATEMENT BY HON. MICHAEL W. WYNNE

Mr. Chairman and members of the committee, I am pleased to come before you today to talk about the Air Force's new start request to lease 100 KC–767 air refueling tanker aircraft.

On May 23, the Department announced the Secretary's decision to approve the Air Force's proposal to enter into a multi-year pilot program for leasing general purpose Boeing 767 tanker aircraft.

There is consensus within the Department that we must start recapitalizing the airborne tanker fleet as soon as possible, and that re-engining the KC–135E aircraft may not be sufficient to extend their service life. Options included an aircraft incorporating a new design, or a variant of an existing aircraft. An aircraft based on a new design would cost the Department research and development funds and some estimates are that such a new aircraft would cost in the range of $200–$250 million per unit, while the planned commercial derivative, if it was available, was estimated to cost between $150–$161 million.

There are only four suppliers who could develop and produce such a tanker aircraft—Boeing, Lockheed Martin, EADS, and the Russians—and only three currently produce wide-body aircraft. The Department's plan, in the President's fiscal year 2004 budget, was to begin the tanker development program—a commercial derivative—in fiscal year 2006, with the first tanker delivery targeted for fiscal year 2009. However, when Congress gave us pilot program authority to lease, this allowed the Department to aggressively pursue the tanker version of the 767 aircraft, an option which might not have been available in fiscal year 2006 if Boeing had shut down the commercial production line. On its face, this is clearly a less expensive alternative than new development. It also has far less cost risk than waiting until fiscal year 2006 when the same commercial opportunity might no longer exist.

The Air Force proposed leasing tankers and brought their proposal to the Leasing Review Panel, which compared the merits and shortcomings of both leasing and purchasing KC–767 aircraft, given the 767 line remained open for both leasing and purchasing. Based on input from the co-chairs of this panel, Under Secretary Aldridge and Under Secretary Zakheim, the Secretary determined that the lease option best met the needs of the Air Force and was preferable because leasing minimizes the near-term cost to the Department of Defense and delivers the aircraft sooner. If we were to purchase the aircraft and Boeing were to deliver them on the same schedule as it will under the lease, it would require billions of dollars more in the Future Years Defense Program (FYDP). As we have pursued a goal of stability in programs, such a reallocation would have been counter to that goal, and disrupted many ongoing programs.

On July 10, the Secretary of the Air Force notified the Defense Committees of the Department's intent to lease 100 Boeing 767 aircraft under the Multi-year Aircraft Lease Pilot Program and provided a report on tanker leasing to those committees, in accordance with section 8159 of the Department of Defense Appropriations Act,

2002. Section 8159 requires the Air Force to wait at least 30 calendar days after it submits the report before entering into the lease contract.

On July 11, the Air Force provided to the Defense Committees and to the Appropriations Committees a new-start notification associated with the proposed lease of 100 KC–767 air refueling tankers. As the Air Force has noted in both cover letters for the report and this notification, it is the Department's intention not to award a contract until the Defense Committees of Congress indicate that they concur with the Department's plans as set forth in the notification. To assist the Defense Committees in their review of the lease proposal, the Department has supplied all four committees with draft versions of the contract with Boeing. Thus far, the House and Senate Defense Appropriations Subcommittees and the House Armed Services Committee have indicated to us that they concur.

While the proposed lease will provide for delivery of a total of 100 KC–767 aircraft, approximately 60 of which will be delivered in the period covered by the FYDP, the Department intends to recapitalize the airborne tanker fleet. The Air Force has been directed to develop a long-range recapitalization plan beyond the current lease proposal and we will address that plan in the President's fiscal year 2006 budget.

At my request, the DOD Inspector General has recently completed an evaluation of the process by which the Department arrived at the decision to lease tankers from Boeing. The results of this evaluation provide insight into the decisionmaking process conducted by the Leasing Review Panel.

Thank you, Mr. Chairman, for the opportunity to testify before the committee. I would be happy to answer any questions that you and the members of the committee may have.

Chairman WARNER. Thank you very much.

Mr. Kaplan, we welcome you.

Mr. KAPLAN. Thank you, Mr. Chairman.

Chairman WARNER. This is your first appearance?

Mr. KAPLAN. Other than my confirmation hearing, yes, sir, Mr. Chairman.

Chairman WARNER. You are on your own. [Laughter.]

Mr. KAPLAN. I appreciate that.

Senator LEVIN. Unlike your confirmation hearing, by the way.

Mr. KAPLAN. It felt like I was on my own there too, Senator. [Laughter.]

STATEMENT OF JOEL D. KAPLAN, DEPUTY DIRECTOR, OFFICE OF MANAGEMENT AND BUDGET

Mr. KAPLAN. Thank you, Mr. Chairman and members of the committee. I am pleased to be here today to discuss the Air Force's planned lease of Boeing KC–767A refueling aircraft. I will make a brief statement describing OMB's role in the process that led to the decision to approve the lease proposal, and I will be happy to answer any questions you may have.

As with all lease proposals, OMB reviewed the terms of the lease as they were developed by the Air Force. OMB's role in such transactions is to ensure that our warfighters have the resources they need, while maintaining fiscal discipline to protect the taxpayer.

Both the Secretary of the Air Force and the Office of the Secretary of Defense convincingly argued that a modernized tanker fleet made available on an expedited basis was and remains essential to ensure that our military is adequately supported in the war on terror and other critical missions. The facts supporting the military necessity for the lease are discussed at length in the Air Force's report to Congress and in Secretary Roche's testimony before you. I will not repeat those facts in detail, but simply highlight the Air Force's strong belief in the urgent need to recapitalize its aging tanker fleet.

The arguments in support of the need for new tankers may also have informed Congress's judgment in enacting section 8159 of the Fiscal Year 2002 Defense Appropriations Act. In section 8159, Congress expressly authorized the Air Force to lease Boeing 767 aircraft for these purposes.

Shortly thereafter, the Air Force proposed a tanker lease that was extensively reviewed both by OMB and within the Department of Defense. OMB's unflagging focus during nearly 2 years of review and negotiation was to ensure that the Air Force entered into the most advantageous deal possible under the circumstances.

The tanker lease proposal was not without its challenges. The Air Force presented an exceedingly complex lease proposal that raised many unique issues. During the review process and pursuant to its longstanding institutional responsibilities, OMB posed a number of tough questions regarding the need for the aircraft, the business case supporting the lease proposal, and the aircraft price.

Of all these issues, from OMB's perspective ensuring that the price represents the best value for the taxpayer was paramount. As a result, OMB was aggressive in working to hold down costs while preserving capabilities. Early on, OMB was concerned that the initial price of the tanker aircraft was too high and believed that through negotiation with Boeing the Air Force should and could reduce the price. By the time negotiations were concluded, the aircraft price had dropped from an early estimate of $150 million to a final price of $131 million. Reducing the price per plane $20 million achieved $2 billion in savings for the taxpayer.

The committee has requested that I address the decisions to proceed with a lease instead of purchase and to classify the lease as an operating lease. Both of these issues were challenging, involving subjective judgments on difficult analytical questions. Under our Circular A–94, OMB requires a lease versus purchase analysis for any agency proposing a lease and the results are an important part of our decision-making process.

OMB worked closely over many months with the Air Force to understand its business case supporting the lease proposal and the give and take of these discussions resulted in significant improvements to the Air Force's model. While OMB and the Air Force agreed that leasing in present value terms is a higher cost option than purchase, the magnitude of the difference varies depending on certain assumptions. The Air Force estimates that the net present value of the lease proposal is $150 million more than a purchase. However, the Air Force report to Congress also states that the difference between the net present value of the lease and purchase could be as high as $1.9 billion depending on a variety of complex assumptions.

The administration decided to approve the lease understanding this range of financial costs in order to satisfy an important military requirement in the post-September 11 world. Leasing these aircraft will result in delivery of 60 new 767 tanker aircraft by 2009. There is no question that without a substantial reallocation of resources that would have a negative impact on other programs critical to national security, direct purchase would take much longer to acquire for the Air Force the same number of aircraft.

Determining whether the proposed lease qualifies as an operating lease under OMB Circular A–11 also raised difficult analytical questions. Of necessity, the assessment of whether or not a lease is an operating lease under A–11 is based on estimates and assumptions that can be subject to honest disagreement. Some of the A–11 criteria contain considerable ambiguity. As a result, capable and impartial analysts applying those criteria to the same information may reach different conclusions about whether a lease is a capital lease or an operating one, especially when the proposal is right at the margin.

In light of the Air Force's conviction that these planes are needed to meet an urgent military need and in light of clear congressional intent to support a lease as expressed in legislation, OMB believed it appropriate to resolve ambiguities in favor of classifying this transaction as an operating lease.

Throughout its review process, OMB repeatedly questioned numerous aspects of the deal in order to press the Air Force to complete the best possible deal for the taxpayers. In addition to helping the Air Force to negotiate the price down, OMB, together with the Office of the Secretary of Defense, also raised concerns about other aspects of the proposed contract, including operational restrictions and the lack of adequate liability protection. As a result, the Air Force went back to the negotiating table and improved these contractual provisions to the benefit of the military and the taxpayers.

OMB believes that the lease proposal satisfies Congress's intent in enacting the legislation authorizing this lease and represents the best achievable lease. Over the next few months, we will work with the Department to ensure that the funds required for the lease are included in the Air Force's fiscal year 2005 budget and their future plans.

Thank you, Mr. Chairman, for the opportunity to testify on this important issue. I will be happy to answer any questions you and the members of the committee may have.

[The prepared statement of Mr. Kaplan follows:]

PREPARED STATEMENT BY JOEL D. KAPLAN

Thank you, Mr. Chairman and members of the committee. I am pleased to be here today to discuss OMB's role in reviewing the Air Force's planned lease of Boeing KC–767A refueling aircraft. Although I was not at OMB at the time the decision to proceed with the tanker lease was made, I will make a brief statement describing OMB's role in that process and I will be happy to answer any questions you may have.

As with all lease proposals, OMB reviewed the terms of the lease as they were developed by the Air Force. OMB's role in such transactions is to ensure that our fighting men and women have the resources they need, while maintaining fiscal discipline to protect the taxpayer. Both the Secretary of the Air Force and the Office of the Secretary of Defense convincingly argued that a modernized tanker fleet, made available on an expedited basis, was and remains essential to ensure that our military is adequately supported in the war on terrorism and other critical missions.

The facts supporting the military necessity for the lease are discussed at length in the Air Force's report to Congress on the lease proposal of July 10, 2003, and in Secretary Roche's testimony before you today. I will not repeat those facts in detail, but simply highlight the Air Force's strong conviction about the urgent need to recapitalize the aging tanker fleet. The arguments in support of the need for new tankers may also have informed the debate in Congress at the time section 8159 of the Fiscal Year 2002 Defense Appropriations Act was enacted. In section 8159, Congress expressly authorized the Air Force to lease Boeing 767 aircraft.

Shortly thereafter, the Air Force proposed a tanker lease that was extensively reviewed both by OMB and within the Department of Defense. OMB's unflagging

focus during nearly 2 years of review and negotiation was to ensure that the Air Force entered into the most advantageous deal possible under the circumstances. The tanker lease proposal was not without its challenges: the Air Force presented an exceedingly complex lease proposal that raised many unique issues. During the review process, and pursuant to its long-standing institutional responsibilities, OMB posed a number of questions regarding the need for this aircraft; the business case supporting a lease proposal; and the aircraft price.

Of all these issues, from OMB's perspective, ensuring that the price represented the best value for the taxpayer was paramount. As a result, OMB was aggressive in working to hold down costs while preserving capabilities. Early on, OMB was concerned that the initial price of the tanker aircraft was too high, and believed that, through negotiation with Boeing, the Air Force should and could reduce the price. By the time negotiations were concluded, the aircraft price had dropped from an early estimate of $150 million to a final price of $131 million. Reducing the price per plane by $20 million achieved $2 billion in savings for the taxpayer.

The committee has requested that I address the decisions to proceed with a lease instead of a purchase and to classify the lease as an operating lease. Both of these issues were challenging, involving subjective judgments on difficult analytical questions. Under our Circular A–94, OMB requires a lease vs. purchase analysis from any agency proposing a lease, and the results are an important part of our decision-making process. OMB worked closely over many months with the Air Force to understand its business case supporting the lease proposal, and the give and take of these discussions resulted in significant improvements to the Air Force's model. While OMB and the Air Force agreed that leasing, in present value terms, is a higher cost option than purchase, the magnitude of the difference varies depending on certain assumptions. The Air Force estimates that the net present value of the lease proposal is $150 million more than a purchase. However, the Air Force's Report to Congress also states that the difference between the net present value of lease and purchase could be as high as $1.9 billion, depending on a variety of complex assumptions. The administration decided to approve the lease understanding this range of financial costs in order to satisfy an important military requirement in the post-September 11 world: leasing these aircraft will result in delivery of 60 new 767 tanker aircraft by 2009. There is no question that without a substantial reallocation of resources that would have a negative impact on other programs critical to national security, direct purchase would take much longer to acquire the same number of aircraft.

Determining whether the proposed lease qualifies as an "operating lease" under OMB Circular A–11 also raised difficult analytical questions. Of necessity, the assessment of whether or not a lease is an operating lease under Circular A–11 is based on estimates and assumptions that can be subject to honest disagreement. Some of the A–11 criteria contained considerable ambiguity. As a result, capable and impartial analysts applying those criteria to the same information may reach different conclusions about whether a lease is a capital lease or an operating one, especially when the proposal is right at the margin. In light of the Air Force's conviction that these planes are needed to meet an urgent military need, and in light of clear Congressional intent to support a lease, as expressed in legislation, OMB believed it appropriate to resolve ambiguities in favor of classifying this transaction as an operating lease.

Throughout its review process, OMB repeatedly questioned numerous aspects of the deal in order to press the Air Force to complete the best possible deal for the taxpayers. In addition to helping the Air Force to negotiate the price down, OMB, together with the Office of the Secretary of Defense, also raised concerns about other aspects of the contract, including operational restrictions and the lack of adequate liability protection. As a result, the Air Force went back to the negotiating table, and improved these contractual provisions to the benefit of the military and the taxpayers. OMB believes that the lease proposal satisfies Congress' intent in enacting the legislation authorizing this lease, and represents the best possible lease under the circumstances. Over the next few months, we will work with the Department to ensure that the funds required for the lease are included in the Air Force's fiscal year 2005 budget and their future plans.

Thank you, Mr. Chairman, for the opportunity to testify on this important issue. I would be happy to answer any questions you and the members of the committee may have.

Chairman WARNER. Thank you. We will proceed to a 6-minute round of questions.

Secretary Roche, this committee and indeed Congress would never want to ask any uniformed member of the Armed Forces to take risks as a consequence of aging equipment, such risks being over and above the normal risks that they all take every day, whether it is the takeoff or the landing of a brand-new airplane or an old one. You have in this room as I understand it several who have experienced the problems with these aircraft. Could you just summarize the anecdotal evidence that you present to this committee that it is imperative that we not, I presume the word would be, continue to require these air crews to take risks associated with aging equipment?

Secretary ROCHE. Mr. Chairman, thank you. We would never ask any pilot or crew to go on an aircraft that ought not to be flown. The concern is not so much the risk that they would have been flying. It is the risk of the fleet being grounded or not being available to be used in a particular operation.

As of today, not counting the aircraft that are in depot, of the 135 fleet, roughly 78 percent are ready to be used or a third is not ready to be used. If you count the aircraft that are in depot, it is something like 35 percent are not available.

The concern is when you have airplanes that are as old as they are, we do not know how they will fail. We worry about a major class problem which would cause us to ground the entire force because we do not know how they are going to behave as they get older. We have been surprised on a number of occasions.

The issue, as we propose it, is to have sufficient number of newer aircraft to be able to hedge against that happening. If we had 100 new airplanes and the 59 KC–10s, which are only about 18 years old now, that 159 number is a dramatic hedge in any particular scenario to be able to make sure we could satisfy the requirements of the deployed forces as well as aircraft overhead.

I have been on a KC–135E and had two of the three generators go out over the Atlantic, and it gets a little dicey looking for divert fields in Canada. A second generator came on, we were fine. Another time, 2 hours west of Honolulu, we lost all hydraulics on one side of the aircraft, which when we understood the plane was so old that the hydraulics are really boosting cables, you can fly without hydraulics on one side of the airplane, and we went from island to island until we could get to Okinawa and have an emergency landing.

So it is a third of the time these planes are unavailable.

Chairman WARNER. An Air Force economic service life study, ESLS, of KC–135 tanker aircraft in February 2001 stated that the tanker fleet was structurally viable to 2040 and there was no urgent need to replace the KC–135s. Now, what has changed? I presume that this was a well thought through report.

Secretary ROCHE. In fact, Mr. Chairman, as we look back on that report, we would not have submitted it. It used old data and it just compared the rising costs to maintain as compared to the budget allocation for maintenance. When we took a look at that in 2003, the costs assumed to have been in place in 2003 in fact were much higher.

What it did not take a look at was what were the conditions of the aircraft in the depot, what was the condition of the corrosion factor.

Chairman WARNER. So you think this, frankly——

Secretary ROCHE. It was a faulty study.

Chairman WARNER. A faulty study?

Secretary ROCHE. Yes, sir.

Chairman WARNER. Now, Secretary Wynne and perhaps Mr. Kaplan, I am sure you are aware of the cost analysis conducted by the CBO which estimates that a lease of these 100 767s would be over $5 billion more expensive than outright purchase in then-year dollars. In the DOD analysis, what was the estimate of the cost of the lease versus purchase in then-year dollars?

Secretary WYNNE. I do not think I have a disagreement in then-year dollars, sir. I think I have a disagreement as to whether we should use then-year dollars in comparison. The better comparison on any financial arrangement is net present value, and that comes out to be, it ranges between $100 million and $150 million——

Chairman WARNER. Is the CBO estimate accurate in your view, or are they just using different——

Secretary WYNNE. I have not reviewed their thing to comment. I can take that for the record.

Chairman WARNER. Hey, wait a minute. You have not reviewed the CBO report?

Secretary WYNNE. I have not looked at it in depth, sir. I just have looked at it in very surface amount.

Chairman WARNER. I find that somewhat disturbing, that you have not in your preparation looked at it, because it is a valuable contribution. We will get testimony on it later.

Do you have any comment on that, Mr. Kaplan?

Mr. KAPLAN. Yes, Mr. Chairman, I have had an opportunity to review the CBO analysis. There are significant differences in OMB's analytical approach. There are not ultimately significant differences in the fact that everyone I think who has looked at this lease ultimately concluded, which is that the lease option is more expensive in both then-year dollars terms and in terms of net present value.

The Air Force's discussion in its submission to Congress did conclude that there was a range, as I said in my testimony, of between $150 million and $1.9 billion, I believe, in net present value. Net present value is the criterion that our OMB Circular requires us to use.

Chairman WARNER. Secretary Roche, having had some experience in a military department as you have had, and you have been a student of Congress and this committee for many years, you have professionally had a long association, what is your understanding of why your predecessors, be they civilian or uniformed, did not address this question in the depth and with the conviction that you have addressed it to push the situation towards what I view as a most extraordinary exception to the way we do business, Congress and the Department of Defense?

Secretary ROCHE. Mr. Chairman, the only conclusion I can come to is that, given the procurement holiday and given the low budgets

of the 1990s, there were so many other priorities that the sense was that tankers were not that important.

Second, the planning models that were used assumed two major conflicts and you plan for those, and I think when they looked at that they felt they had enough excess capacity in the tanker force, as compared to looking at the reality of how we were using AWACS, et cetera, in various contingencies. In July 2001, we could not have predicted a war in Afghanistan and a war in Iraq that would have required us to go to battle in landlocked areas, or that our tanker fleet would be used more than half the time by non-Air Force aircraft, by Navy and Marine Corps aircraft and coalition partners.

Chairman WARNER. Those are operational studies. I have to presume that in the vast number of studies conducted by the Department, we had this two major and one minor that somebody addressed.

But my last question to you is a very simple one, and that is the magnitude of the added costs being thrust on the taxpayers by this proposal prompts me to ask: Did you look at, say, an emergency buy with a lease along these lines of, say, 25 aircraft of the 100 aircraft, thereby giving time for the traditional process of a budget submission by the President and, if necessary, a decision by the Secretary of Defense to create a wedge for the Department of the Air Force to handle this situation?

Secretary ROCHE. Mr. Chairman, we did not look at 5, 25, or 50. We looked at the buy of 100 after Congress had passed the bill that said we had the authority to try to lease 100. So we used that number.

Chairman WARNER. Did you feel that that legislation bound you?

Secretary ROCHE. No, sir, no, it did not. It just gave us a point. We talked about looking at 50 at some point and then just stuck to the 100 number because it was a good comparison and a full 100 plus the 59 gave us a full hedge.

The issue was that the up-front budget authority was simply not available and we did not think it would become available. There were also procurement rules, like the color of money that was used for development versus production.

Chairman WARNER. Let me ask you quickly: Is it a viable option? Even though you seized the 100 and Congress may have in the course of the language put in two bills—and I acknowledge clearly that Congress in a sense, the full Senate, has acted on the appropriation and indeed the insertion in the authorization. I take notice of that.

Secretary ROCHE. Mr. Chairman, you would be a better authority than I would as to whether Congress could in fact give us $5 to $11 billion more over the next 5 years just for tankers. We were trying to put this in our budget over a longer period when we in fact could handle the costs of the lease because our existing expenses for things like C–17 would come down.

Chairman WARNER. I am going beyond my time, but Congress has to react to the budget request by the President. Initially the President has to make the decision whether he wants this wedge for the Department of the Air Force. Then it is up to Congress to decide.

Senator Levin.

Senator LEVIN. The CBO has concluded that the use of long-term leases reduces the ability of our budgets to depict the government's financial commitments; undermines fiscal discipline by circumventing controls, including the limits on deficits and caps on discretionary spending; and allows agencies to avoid facing the full costs of their purchasing decisions.

As a matter of fact, the Air Force has stated that the dominant reason for the lease approach is that it enables the Department to enable tanker aircraft without requiring significant up-front funding. So the added costs here that exist are just delayed, put on the backs of future budgets.

I am wondering, Mr. Kaplan, whether or not you agree or disagree with the CBO's conclusion that the use of long-term leases has the effect of weakening fiscal discipline by pushing costs off into outyear budgets?

Mr. KAPLAN. Senator, I think it is fair to say that OMB shares CBO's institutional skepticism when presented with an individual lease proposal and, for that matter, whether lease proposals across the board would be the right way to go. I think that skepticism is evident in Director Daniels' correspondence, and his review of the lease. I think the process that the Air Force and OMB and the Department of Defense and, for that matter, Congress has undergone for almost 2 years now in review of this lease suggests that this is not the normal course of events, that this is a unique proposal that we are looking at in light of unique requirements identified and recognized more clearly post-September 11.

Senator LEVIN. Why not lease other DOD assets if we are going to lease these tankers? There are a lot of other requirements that are unmet. We have a whole long list of unmet requirements. Why not use this then as a precedent to lease cargo ships or cargo aircraft or Navy ships or Army combat vehicles? We have a lot of unmet requirements.

Mr. KAPLAN. We do and the President's budget that he submitted to Congress and so far has received the support of Congress I think has gone a long way towards meeting those requirements. Those requirements have significantly increased, obviously, post-September 11.

Senator LEVIN. My question is what is different about this? We have a lot of unmet requirements.

Mr. KAPLAN. We are trying to meet all of those requirements.

Senator LEVIN. But we are not.

Mr. KAPLAN. Well, but this lease proposal gives us an opportunity within the FYDP to meet those requirements and meet this requirement. Some of the alternative proposals that have been mentioned here today—purchasing, for instance, on the same delivery schedule—would make it that much more difficult to meet those requirements.

Senator LEVIN. This proposal pushes the cost beyond the future years, the FYDP.

Mr. KAPLAN. It does push some of the costs beyond——

Senator LEVIN. A major part of the costs.

Mr. KAPLAN. A major part of the cost, that is true, Senator.

Senator LEVIN. You are not answering my question, it seems to me. We have a lot of unmet requirements. Why not meet those in the same way through a lease? Those are requirements, they are unmet, they are significant, and we are not meeting them.

Mr. KAPLAN. I think our practice, Senator, is we are going to try to meet as many of those requirements as possible through the procurement process. After Congress authorized us to consider the lease proposal in this individual circumstance, the Air Force developed a proposal. In light of the needs and in light of our unwillingness to do a substantial reallocation that would preclude us from meeting some of those important needs, we thought this was an acceptable way to go for this lease.

Senator LEVIN. Okay, thank you.

Secretary Roche, you indicated that the study which was referred to by the chairman, which was a 2001 study I believe, showing that the tankers would be viable through the year 2040, was not a good study?

Secretary ROCHE. Sir, I thought it was not based on a sufficient amount of data. Some of the aircraft will last that long.

Senator LEVIN. My question is this: Why not conduct another comprehensive study, then, to substitute for that? You have not done that, right?

Secretary ROCHE. In the course of coming together on this lease, we have looked at a number of things, including prior corrosion studies, and also we have reexamined the costs and projected additional trends.

Senator LEVIN. Have you made another comprehensive study to substitute for that one?

Secretary ROCHE. That was not a comprehensive—we have, yes, done modifications of that we can clearly give you, sir.

Senator LEVIN. All right, so you have done a study which is as comprehensive as the one you disagree with?

Secretary ROCHE. I would think, yes, sir. I think yes, it is.

Senator LEVIN. Thank you. Please send us those subsequent studies then, if you would, that you say are just as comprehensive.

[The information referred to follows:]

Headquarters U.S. Air Force

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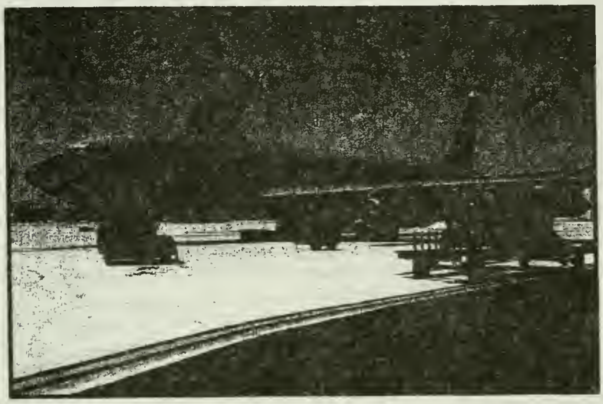

KC-135E
Business Case Analysis

U.S. AIR FORCE

1 May 2003

EXECUTIVE SUMMARY

At an average age of over 40 years, the KC-135 fleet is the oldest combat weapon system in the United States Air Force (USAF). As this tanker fleet ages, ensuring warfighters have the required number of tankers to perform their wartime mission is a growing challenge. Through the nineties, the KC-135 fleet started to show its age. In 1991, Air Force Materiel Command initiated aging aircraft inspections and repairs to maintain the airworthiness of this geriatric fleet. By 2000, 32% of the KC-135 fleet (29% of the entire USAF refueling capability) was unavailable due to depot level maintenance. This reduced the refueling capability to the warfighter and caused a backlog at the depot facilities increasing the average number of days in depot level maintenance to over 400.

The USAF realized that, historically, annual depot price per aircraft grew by 18% compounded annually, and the fleet availability decreased by 1% per year. The combination of increasing costs and decreasing availability in the future compels the USAF to act now to balance cost, capability, risk, and recapitalization of the KC-135 fleet.

This business case is based on the FY04 President's Budget (PB) and examines three scenarios for retirement of the KC-135Es, the oldest, least-capable tankers in the US arsenal:

- FY04 PB without retiring any E-models (until KC-135 replacement is available)
- FY04 PB with 68 KC-135E Reduction
- Complete KC-135E retirement by FY08

In all cases examined, the KC-135 replacement aircraft reflected in the FY04 Future Years Defense Program begins delivery in FY09 and completes in FY16. In the baseline and the 68 reduction cases, the remaining KC-135Es retire in a one-to-one relationship as KC-135 replacements are delivered.

This study considers the Baseline Case and compares cost savings in the remaining cases, then compares capability lost in three ways: total aircraft inventory, available KC-135R equivalents, and sortie generation rate.

The comparison cannot be purely analytical. Force structure judgment considerations were also used to make this decision as outlined in the 2003 Tanker Roadmap. The 68 KC-135E Reduction balances cost savings with capability lost, by retaining personnel and flying hours to produce a greater utilization rate on the remaining aircraft, thereby mitigating the loss of KC-135E tails. This effort also balances force structure by leveling Air Reserve Component (ARC) forces at similar manning and capability levels without a reduction in ARC units.

The results of this business case analysis support the Air Force's FY04 PB initiative to reduce the KC-135E fleet by 68 Primary Assigned Aircraft: retiring 61 and moving the other 7 to Backup Aircraft Inventory. Compared to the baseline, this case avoids $4.5B, while causing only a 4-5% reduction in average sortie generation rate and a 5% loss in availability (averaging 25 KC-135R-equivalents). In present value terms, the savings would be about equal to the flyaway cost of 22 new KC-767s or 13 new C-17s.

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I. INTRODUCTION

The United States Air Force (USAF) must organize, train, and equip Air and Space Forces in support of the Combatant Commanders and the National Defense Strategy. Air refueling is a ubiquitous and key combat capability in all theaters and in all war plans and contingencies. As the US Air Force tanker fleet ages, ensuring the warfighters have the required number of tankers to perform their wartime mission is a growing challenge. Through the nineties, the KC-135 fleet started to show its age. In 1991, Air Force Materiel Command initiated an Aging Aircraft Program to analyze the potential growth in major structural repairs of the aging fleet. By 2000, 32% of the KC-135 fleet (29% of the entire USAF refueling fleet) was unavailable due to depot level maintenance. This reduced the refueling capability to the warfighter and caused a backlog at depot facilities, increasing the average number of days in depot level maintenance to over 400.

The USAF Chief of Staff challenged Air Force Materiel Command and Air Mobility Command to reverse this trend immediately. Air Force Materiel Command radically restructured their processes, maintained depot repair lines, and with the concurrence of Air Mobility Command, deferred depot inputs. The USAF realized that, historically, annual depot price per aircraft grew by 18% compounded annually, and the fleet availability decreased by 1% per year. The conclusion reached was that the fleet had entered into a fiscal and capabilities "death spiral." In the future, only recapitalizing the fleet could provide the combatant commanders surety of mission success.

This business case is based on the FY04 President's Budget (PB) and examines three scenarios for retirement of the KC-135Es, the oldest, least-capable tankers in the US arsenal. It compares cost savings and operational capabilities of three different retirement cases, and assesses cost-capability tradeoffs.

II. BACKGROUND

In 1954 the Air Force initiated the KC-135 Air Refueling program to replace its aging fleet of WWII-era KB-50 and Korean War-era KC-97 air refueling tankers. Between 1957 and 1965 over 700 C-135 and KC-135 aircraft were delivered. The peak delivery was 118 KC-135 aircraft in 1959. Today, the USAF is still maintaining and flying 544 of these aircraft. In addition, there are 59 KC-10s purchased in the early 1980s as an insurance policy against structural type failure within the KC-135 fleet. Today there are four models of KC-135s: R-models, E-models, D-models, and T-models. The D-models and E-models are 95% similar from a maintenance and sustainment position; therefore, they will be referred to as E-models. The R-models and T-models are also almost identical from a maintenance and sustainment position; therefore, they will be referred to as R-models. The R-models and E-models resulted from different modernization and re-engining programs initiated in the 1980s. There are 411 KC-135Rs that received new engines and changes to 25 other associated systems. The 133 KC-135Es were fitted with used commercial B-707 engines and struts with 50-60 thousand hours of wear. Within the air refueling fleet, the KC-135E-models have experienced the most maintenance and corrosion problems and are more costly. With an average aircraft age of 43 years, the KC-135 fleet is the oldest combat weapon system in the Air Force inventory. It is also the oldest large fleet of heavy jet aircraft in aviation history.

Maintaining Aging KC-135s

Faced with the reality that all USAF aircraft type fleets are aging, Air Force Materiel Command established an Aging Aircraft Enterprise Office to assess, predict, and attempt to prevent the onset of age-related supportability issues. Aircraft life is measured three ways: 1) Usage--defined as flight hours; 2) Age--defined as corrosion and material degradation; and 3) Utility--defined as capabilities in the operating environment.

The first measurement is flight usage. For their first 30 years, the KC-135 supported the manned-bomber leg of the strategic Single Integrated Operations Plan (SIOP) and thus, during the prime of their life, the aircraft spent 30% of their time on nuclear alert and did not accrue high flight hours. Over time, the mission of the KC-135 has changed significantly to support global operations of all strike and cargo aircraft. Nonetheless, flight hours on KC-135 aircraft are relatively low compared to commercial airline standards. Commercial airlines, however, do not fly aircraft over 40 years old.

The second critical measurement that defines aircraft life is physical age. In this fleet, corrosion is a function of age. Accurately predicting the extent of corrosion is difficult. The lack of predictability severely limits the ability to efficiently sustain aging fleets. As an example, the wing attachment fitting experienced critical corrosion in the wing attachment pin hole. Prior to improving the pin hole seal, water could enter and get trapped in the pin hole causing corrosion. This repair cost the using commands over $500K per fix. Additionally, in 2000, engineers found severe corrosion of the engine struts on the KC-135E. They estimated some struts were near a zero-margin of safety. The interim repair must be performed no later then September 2004 for $150K per aircraft. Until this fix is completed, the KC-135Es must operate under a flight restriction. This repair should last for five years. At that time, the struts will be replaced at a cost of $2.9M per aircraft. To help weapon systems in the future, the USAF and NASA are currently developing new tools and techniques to predict and evaluate corrosion. In the meantime, the KC-135 is particularly at risk since its 1950s design, materials, and construction did not consider corrosion prevention measures.

The third measurement of aircraft life is utility (ability to accomplish the intended mission in the current operational environment). Aircraft must be constantly updated to reflect current technology, to be sustainable with currently available spares, to comply with mandated safety, environmental, and air traffic control requirements, to interface with other DoD systems and forces, and to effectively accomplish a validated mission within the current joint-warfighting framework. At some point it becomes no longer economically feasible to continually modify and upgrade a weapon system to operate in the current environment.

The KC-135 performed its air refueling and SIOP missions admirably over its 40-year history. It was designed to quickly provide thousands of gallons of jet fuel to strategic bombers like the B-47, B-58, B-66 and B-52 through a "flying boom." However, its missions continue to evolve and grow as the US Air Force's requirements to project Global Power and Global Mobility around the globe have increased. The KC-135's ability to perform its global mission requires significant modifications. At no time in the life of the KC-135 have modifications been more prevalent. Air Mobility Command just finished a ten-year Pacer CRAG modification upgrading the aircraft's compass, radar, and Global Positioning System. The requirement for additional upgrades continues. Global Air Traffic Management (GATM) and Large Aircraft Infrared

Countermeasures (LAIRCM) modifications planned back-to-back will require aircraft to be removed from service to provide these increased capabilities for the operating environment.

Additionally, maintenance issues and "technical surprises" also plague availability. Some examples of recent maintenance problems and costs are summarized in the following paragraphs.

> *Stabilizer trim actuator:* Approximately 40 percent of the fleet was grounded from September 1999 to February 2000 until overhauled actuators were installed. Investigation results recommended immediate and long-term action to correct the discrepancy and prevent future stabilizer failures. Long-term fixes totaled $50M, but initiation was delayed until FY03 due to budget constraints; $15M remains unfunded.
>
> *Fuel System:* The fuel system is the largest driver of non-mission capable (NMC) aircraft in recent years. Fuel tank and fuel bladder leaks continually plague the warfighter. Also, the original fuel tank "corrosion preventative" top coat installed 40 years ago began to deteriorate causing fuel contamination and aircraft down time. Options for repairing topcoat have been tested and found to be acceptable for removal but estimates run about $500K per aircraft. As a cost-avoidance decision, a mitigation effort was deemed an acceptable solution (60-hour fuel filter checks and scotch-brite scrubbing of tanks to remove flaking material). NMC time, however, continues to be negatively affected. Fuel tank leaks are also a major driver of NMC time.

Faced with continuing degradation from aging and newly emerging operational requirements, the USAF recognized that tanker fleet recapitalization is needed. Recapitalization of the KC-135 fleet (544 aircraft) will take between 30 and 40 years given current DoD and USAF budget projections and constraints. This 30 to 40 year effort is limited by a maximum affordable rate of between 15 and 18 aircraft per year (instead of the 1957-65 100+ per year rate). The net effect of this extended recapitalization process is that some of today's 43-year-old KC-135s must be maintained and operated until they are 70-80 years old. Given the irreversible annual increases in operations and maintenance costs and the annual decreases in combat availability, financial and operational options must be explored to maximize existing capability within existing fiscal and physical resources.

III. STUDY STRUCTURE & GROUND RULES

A cross-functional, cross-organizational panel performed this KC-135E Business Case Analysis. Appendix F contains a list of the organizations that supported the effort. The panel was divided into three teams to address separate portions of the assessment. One team analyzed cost, another analyzed the capability associated with each case, and a third team integrated the entire effort and facilitated communication between the analysis teams. All members participated in the synthesis of the results.

Section IV of this report describes the three cases that were studied. Sections V and VI present the cost analysis and capability analysis methods and results. Assumptions specific to the cost or capability analyses are addressed within their methodology sections. Section VII, Synthesis, integrates the results of the previous analysis sections for a comparison of the cases in their entirety. Several relevant appendices follow the summary.

Ground rules were established to place appropriate boundaries on the business case analysis. Overarching ground rules/assumptions were:

- Timeframe of study is FY04 to FY17 (when all Es will be retired, regardless of case).
- KC-X procurement will start in FY09 and finish in FY16 (as planned in FY04 PB).
- The KC-135Rs and KC-10s are retained in the inventory.
- Acquisition cost for follow-on aircraft is not included since the cost would be the same across all cases.
- This business case analysis does not analyze re-engining. USAF and the Office of the Secretary of Defense (OSD) agree that re-engining is not a viable solution for solving the tanker problems. Appendix E contains additional information on the re-engining decision.

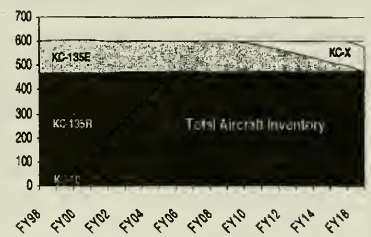
IV. CASE DESCRIPTIONS

This business case analyzed three scenarios. Each considered a varying degree of KC-135E near-term retirements (none, some, all). The term "Reduction", used in the case summaries below, refers to the number of aircraft removed from the Primary Aircraft Inventory.

Baseline Description: FY04 PB without 68 KC-135E Reduction

This scenario is the baseline and it reflects the FY04 PB without the 68 KC-135E Reduction. This is viewed nominally as the scenario without KC-135 retirements until FY09, although it includes three aircraft retirements unrelated to the 68 KC-135E Reduction (one due to aircraft condition and two for already programmed reasons). The KC-135 E-model and R-model totals also vary over time due to Congressionally added funds to re-engine limited quantities of E-models to R-models. The chart and table below portray this baseline air refueling force structure of 603 aircraft, composed of 133 KC-135E, 411 KC-135R and 59 KC-10 aircraft at the end of FY02. This scenario assumes all KC-135Es are retired on a tail-for-tail basis as the KC-135 replacement (KC-X) is delivered, beginning in FY09 with final retirement in FY17.

Total TAI Base Case
Total Tanker Fleet Inventory



Baseline	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
KC-10 TAI	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
KC-135R TAI	408	408	408	411	411	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
KC-135E TAI	139	138	138	135	133	126	126	126	125	124	124	123	117	108	93	75	57	39	21	0
KC-X TAI												1	7	16	31	49	67	85	100	100
Total TAI	606	605	605	605	603	602	602	602	601	600	600	600	600	600	600	600	600	600	597	576

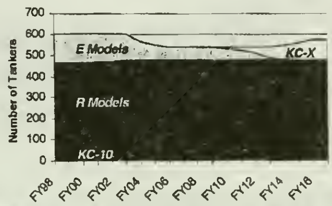
Total Aircraft Inventory
FY04 PB without 68 KC-135E Reduction

Case 1 Description: FY04 PB with 68 KC-135E Reduction

This case is the same as the baseline but includes the 68 KC-135E Reduction. Under the 68 KC-135E Reduction, 61 KC-135Es are retired and 7 remain as flyable Backup Aircraft Inventory (BAI) reserve. The Total Force picture is a reduction of 68 Primary Aircraft Authorization (PAA) -- thus "68 KC-135E Reduction."

The table below reflects the Total Tanker Force with 68 KC-135E Reduction between FY04 and FY06. This case assumes there are no further reductions to aircraft inventory until the KC-135 replacement aircraft begins to deliver in FY09. The remaining KC-135Es are retired one-for-one with the delivery of the KC-135 replacement aircraft.

Total TAI FY04 PB 68 KC-135E Reduction
Total Tanker Fleet Inventory



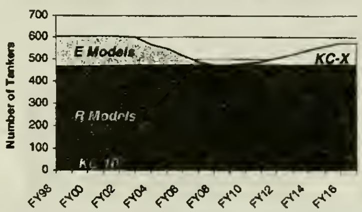
FY04 PB - 68 Reduction	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
KC-10 TAI	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
KC-135R TAI	408	408	408	411	411	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
KC-135E TAI	139	138	136	136	133	128	89	73	64	63	63	62	56	47	32	14	0	0	0	0
KC-X TAI												1	7	16	31	49	67	85	100	100
Total Fleet TAI	606	605	606	606	603	602	565	549	540	539	539	539	539	539	539	539	543	561	576	576

Total Aircraft Inventory
FY04 PB with 68 KC-135E Reduction

Case 2 Description: Retire all KC-135Es by FY08

This case consists of the historic and FY04 PB planned fleet--but retires all KC-135Es by FY08. In addition to planned changes in the baseline fleet and the "68 KC-135E Reduction," this case adds the retirement of 63 Total Aircraft Inventory KC-135Es (56 PAA and 7 BAI by FY08).

Total TAI All KC-135s Retired
Total Tanker Fleet Inventory



Retire FY08	FY98	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
KC-10 TAI	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
KC-135R TAI	408	408	408	411	411	417	417	417	417	417	417	417	417	417	417	417	417	417	417	417
KC-135E TAI	138	138	138	135	133	128	89	73	41	16	0	0	0	0	0	0	0	0	0	0
KC-X TAI												1	7	16	31	49	67	85	100	100
Total TAI	605	605	605	605	603	602	565	549	517	492	476	477	483	492	507	525	543	561	576	576

Total Aircraft Inventory
All KC-135Es Retired by FY08

V. COST ANALYSIS

Cost Methodology

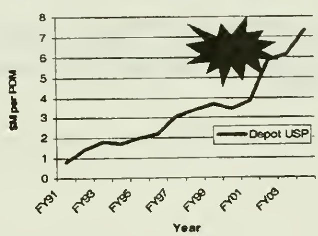
In order to determine the best business case option, the team developed annual and cumulative cost projections for the three previously defined cases. The 2001 KC-135 Economic Service Life Study (ESLS) established the starting point for projecting future costs. The ESLS projected the total costs of operating the KC-135 fleet. These costs include mission personnel (e.g., aircrews and maintenance personnel), unit level consumables (e.g., fuel, consumables, depot-level reparables), indirect support costs, programmed depot maintenance (PDM), Engine Overhauls, Aircraft Modifications, Demilitarization and Disposal, and Sustaining Support (i.e., sustaining engineering).

The team reviewed the ESLS results and accepted all but the PDM estimates, aircraft modifications, and military personnel estimates. The team chose to update the original ESLS estimates for PDM based on trends drawn from FY91-04 depot unit sales prices, revise the military personnel estimates using FY04 PB submissions, update the modifications to reflect the PB04 position, and convert the ESLS constant-year dollars to then-year (TY) dollars. Details and summary are provided below.

Programmed Depot Maintenance
The ESLS PDM analysis assumed that PDM sales rate would grow in the future at one percent a year above inflation and that the work package man-hours would grow at approximately 2.5% per year. That rate is much lower than history indicates. The original ESLS model significantly underestimated the increases in the actual FY03 and projected FY04 sales prices. Therefore, the team used a more realistic sales-price growth rate based on updated sales rates from FY91-FY04.

A more accurate PDM estimate was produced by first calculating an historic average unit sales price (USP) rate for the KC-135 fleet, then developing a PDM growth rate model for forecasting USP out to FY17, and finally, applying the forecast USP to the projected PDM inputs to estimate the PDM cost in the out years. The paragraphs below address each.

KC-135 USP Rates
The team examined the actual USP for PDM from FY91 through FY04 for both the KC-135E and KC-135R-models by source of repair. Analysis indicated that the PDM package sizes (excluding the engine strut) for the "E" and "R" are nearly the same size and all sources of repair show similar growth patterns. With this, the figure below presents a weighted average of KC-135 USP by year used for the assessments. All prices shown are in TY dollars.

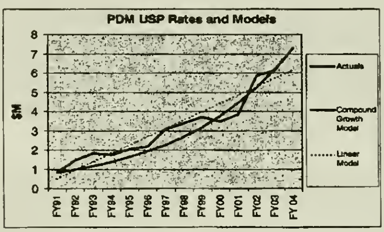


PDM Growth Rate Model
Next, a model was developed to forecast future USP through FY17 by first examining the historic average KC-135 USP change. The team recognized two potential problems with using all of the available historical data to project future KC-135 USP through FY17:

1. Some of the USP increases in FY02 and FY03 resulted from depot losses incurred in FY00 and FY01 when the KC-135 depot "get well" program began. Temporarily, the Air Force Working Capital Fund (AFWCF) absorbed this additional cost until the PDM USP could be adjusted to reimburse the AFWCF. The growth rate proved to be insensitive to whether or not the data after FY01 was included. Therefore, these data points were retained in the growth rate model.

2. Prior to FY94, the unit sales price did not include exchangeable materials. The Depot Business Operations Fund (DBOF) was fully implemented within AFMC by FY94. As a result, unit sales prices since 1994 include the cost of exchangeable materials. While this is a major accounting change, the team verified the USP growth rate was not significantly affected. Therefore, the growth rate model uses the pre-DBOF data.

Next, the team modeled the KC-135 USP data from FY91 through FY04 as shown below. Two model options were explored: linear and compound growth. The compound-growth model better represented the "doubling" rate found in the historical data (every five years the USP doubled). The figure below shows the baseline data used in the PDM growth rate model along with the two potential models.



Out-Year Forecasts for PDM
Total depot PDM costs per year were developed by multiplying the compound growth model for PDM USPs and the projected depot inputs per year through 2017. Depot inputs for each case were reduced from the current 93 per year average to accurately reflect retirement—as more aircraft retire, fewer PDMs are required.

Military Personnel
The team changed the ESLS projections to reflect the reality of the FY04 PB military personnel changes.

Aircraft Modifications
The modifications projected in the ESLS were adjusted to reflect the actual KC-135 aircraft modifications (Appropriation 3010) included the FY04 PB. The original GATM installation schedule reflected in the ESLS was reduced accordingly.

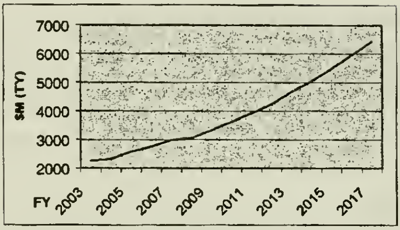
Constant-Year to Then-Year Conversions and Net-Present-Value

Net Present Value (NPV) Calculations:
Constant-year (CY) dollars were discounted into present-value (PV) dollars by using the real discount rate as published in Appendix C to OMB Circular A-94. Since the period of analysis is 14 years, a 14-year discount rate of 2.64 percent was used. This reflects a straight-line interpolated rate between the OMB published 10-year discount rate of 2.5 percent and the OMB published 30-year rate of 3.2 percent.

Monetary Adjustments:
The analysis used a portion of the costs directly from the ESLS. The ESLS CY00 dollars were converted to CY03 dollars using the raw Air Force inflation rate for Air Force 3400 (Operations & Maintenance) funds. Similarly, CY03 dollars were converted to TY dollars using the weighted inflation index for Air Force 3400 (O&M) funds.

Case Summaries of Cost Analysis

Baseline: FY04 PB without 68 Reduction



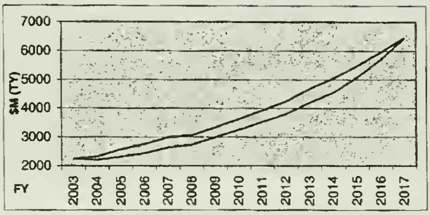
Baseline Annual Fleet Costs in Then-Year Dollars

Baseline Annual Fleet Costs in $M; CY, TY, and NPV Dollars

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
CY$	2229.5	2296.0	2525.3	2669.1	2859.7	2857.8	3066.6	3266.2	3475.8	3678.2	3984.8	4217.7	4493.5	4795.9	5093.2
TY$	2246.6	2317.2	2569.6	2745.1	2988.7	3041.6	3328.8	3614.9	3921.8	4230.2	4672.9	5040.4	5472.9	5952.9	6441.8
NPV$	2218.2	2212.3	2350.1	2404.3	2504.4	2439.2	2552.8	2651.1	2750.6	2837.5	2999.3	3094.4	3213.9	3343.9	4632.5

Total fleet costs are shown by year. The Baseline Case assumes retirement of KC-135Es starting in FY09. The total cost of the Baseline Case from FY04 through FY17 in TY dollars is $56.3B.

Case 1: FY04 PB—68 Reduction



Case 1 Annual Fleet Costs in Then-Year Dollars

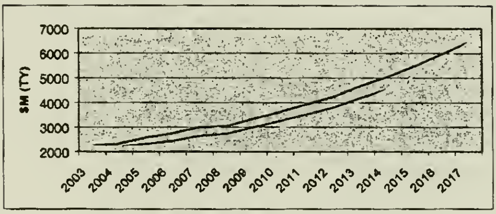
Case 1 Annual Fleet Costs in $M; CY, TY, and NPV Dollars

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
CY$	2229.5	2184 0	2283.5	2372.6	2536.1	2574.2	2759 8	2938 7	3127.3	3310 0	3585.4	3807.5	4173.7	4599.1	5092.5
TY$	2246.6	2202.7	2318.5	2432.1	2641 1	2731 4	2987 2	3243.8	3519.7	3797.7	4195.3	4541.1	5076.7	5704.6	6440.8
NPV$	2218.2	2103.8	2122.3	2132.0	2214 8	2191.8	2292 1	2380.3	2470.2	2549.3	2694.9	2790.2	2982.8	3205.3	4631.7

Total fleet costs are shown by year. Case 1 assumes retirement of KC-135Es in accordance with the FY04 PB. The total cost of Case 1 from FY04 through FY17 in TY dollars is $51.8B. This represents a $4.5B cost savings relative to the baseline.

The graph above shows total annual fleet cost for baseline (upper blue line) and Case 1 (lower magenta line). The difference between the lines reflects annual savings; the total area between the lines reflects cumulative savings.

Case 2: Retire all KC-135E Models by FY08



Case 2 Annual Fleet Costs in Then-Year Dollars

Case 2 Annual Fleet Costs in $M; CY, TY, and NPV Dollars

	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
CY$	2229.5	2184.0	2217.6	2247.5	2330.9	2355.3	2518.9	2693.9	2896.7	3131.8	3490.8	3807.0	4173.7	4599.1	5092.5
TY$	2246.6	2202.7	2250.0	2299.9	2420.6	2492.0	2719.0	2966.2	3253.6	3588.4	4082.1	4540.5	5076.7	5704.6	6440.8
NPV$	2218.2	2103.8	2060.5	2017.8	2032.3	2002.1	2088.7	2178.9	2285.4	2410.2	2622.9	2789.8	2982.8	3205.3	4631.7

Total fleet costs are shown by year. Case 2 assumes KC-135Es are retired by FY08. The total cost of Case 2 from FY04 through FY17 in TY dollars is $50.0B. This represents a $6.3B cost savings relative to the baseline.

The graph above shows total annual fleet cost for Baseline Case (upper blue line), Case 1 (middle magenta line), and Case 2 (lower yellow line). The difference between the lines reflects annual savings; the total area between the lines reflects cumulative savings.

VI. CAPABILITY ANALYSIS

Methodology

This BCA examined air-refueling capability using three metrics:

1. Total Aircraft Inventory (TAI): The sum of all tankers in the planned fleet for each case.
2. R-equivalents available: The number of R-equivalents available was calculated by first subtracting the number of aircraft "not available" to the warfighter from TAI. (Unavailable aircraft are those in depot status either due to programmed depot maintenance, unscheduled depot level maintenance (UDLM), modification, or reserved for the training fleet (TF Coded).) Then, the available aircraft were translated into R-equivalents (based on fuel offload capability), as follows:

Type	Factor	Equivalent
1 KC-135R	1.0	100% of a KC-135R
1 KC-135E	0.84	84% of a KC-135R
1 KC-10A	1.95	195% of a KC-135R
1 KC-X	1.10	110% of a KC-135R

3. Sortie Generation Rate: A sortie generation model was used to calculate sortie generation rate for each case. Appendix D details the Sortie Generation Model.

The KC-10A fleet consists of 59 TAI, with an estimate of ten in depot status on any given day. For the purpose of the BCA, an assumption was made that 49 would be available and not reserved for training during a "war effort."

The KC-135 fleet consisted of 411 KC-135Rs and 133 KC-135Es TAI. Details: Altus AFB houses the KC-135 school house and holds 24 aircraft as TF Coded. The number of depot-possessed aircraft varies from year-to-year. Data depicted prior to FY03 reflects actual numbers as reported by the System Program Office (SPO). FY04 and out availability estimates are based on SPO depot estimates and compared to an Air Force availability model. In this model, aircraft availability is predicted in three cases: best case, worst case, and most probable. Over the past three years (FY01–FY03), fleet availability mirrored the most probable case projections due to process improvements in depot management. Unfortunately these are one-time fixes. It is important to note that while maintaining these practices ensures efficient depot throughput, it cannot reverse the effects of age. The SPO estimate of depot-possessed aircraft from FY04 to FY17 fell between the most probable and worst case estimates of the availability model. The BCA considered the SPO's estimate as valid after this comparison, since the significant investment made between FY00 and FY03 to "fix the depot" cannot be sustained till FY17. Once the R-equivalent availability was calculated for each case, it was compared to the tanker requirement (Appendix C) of 500–600 R-equivalents available.

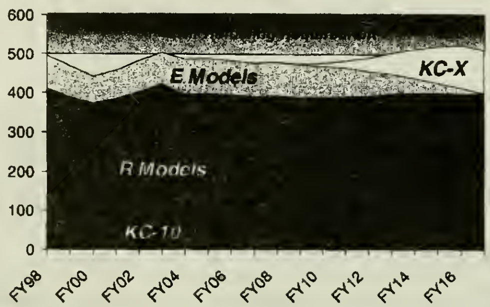
The third analysis used the sortie generation model to compare the effect of aircraft retirement on the warfighter's ability to produce air-refueling sorties in a maximum effort, as compared to the Baseline Case. This analysis is important because simply examining aircraft tails or equivalents, discounts improvements in aircraft utilization created by increasing crew ratios and per-aircraft maintenance manning.

Case Summaries of Capability Analysis

Brief Historical Analysis: The graph below graphically shows the depot possessed more than 100 aircraft per year in FY99–FY01. Depot-possessed aircraft peaked in 1999 at 176. During 1999, 40% of the KC-135 fleet was grounded due to stabilizer trim actuator inspection failures. The Chief of Staff of the Air Force directed his staff and AFMC to fix the depot. The result was a dramatic improvement in aircraft availability from FY01 to FY03.

Baseline: FY04 PB without 68 KC-135E Reduction

Total Fleet in R Model Equivalents



The graph represents the air refueling fleet in R-equivalents available and shows capability barely meeting the lower bound of the "Air Refueling Requirement" region of the graph. In this baseline, the Air Force can prosecute some wartime scenarios as planned, yet others would be impacted by a shortage of tankers. In order to prosecute a war plan requiring more than 504 R-equivalents available, the warfighter would have to make operational tradeoffs to mitigate the shortage of tankers. These decisions could include delaying the deployment phase, lengthening the air campaign, or reducing the number of tankers held in withhold.

Close study of the graph shows the total tanker availability decreases slightly between FY03 and FY09. This "availability attrition" was calculated by an availability model and shows tanker availability falling below the air-refueling requirement range, even without aircraft retirements. The availability model predicted the number of depot-possessed aircraft will exceed 100 aircraft.

Once the delivery of the KC-135 replacement (KC-X) begins, tanker "availability" increases significantly. This is because the R-equivalence of the KC-X is 1.1 (110%) and the maintenance

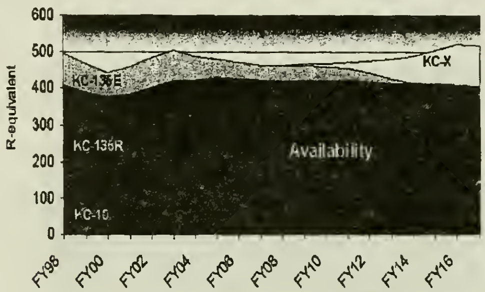
concept is different. The end result, with all the KC-135Es recapitalized, is 512 R-equivalents available.

An additional metric used to characterize tanker capability in the employment role is the sortie generation rate. The Sortie Generation Model (Appendix D) estimated the maximum performance of the aircraft and the aircrews. In the Baseline Case, crew ratios are: 1.36 for Active Duty, 1.27 for the ANG, and 1.27 for the AFRC. These ratios reflect current funding.

Case 1: FY04 PB—68 KC-135E Reduction

In this case, the USAF loses 11% TAI, 7% of availability, and only 4-5% of sortie generation capability. The retirement of 61 KC-135E TAI shown below reflects a capability loss that falls below the air refueling capability "requirements range." Therefore, in order to prosecute a war plan requiring 500 or more R-equivalents available, the warfighter would have to make operational tradeoffs to mitigate the shortage of tankers. These decisions could include delaying the deployment phase, lengthening the air campaign, or reducing the number of tankers held in withhold.

Total Fleet In R Model Equivalents



Under the 68 KC-135E Reduction case, the Air Force will increase crew ratios for the remaining tankers:

	FY03	FY06
AD	1.36	1.75
ANG	1.27	1.8
AFRC	1.27	1.5

In addition to retaining the crew force, maintenance per aircraft will also be increased to support higher utilization rates on the remaining aircraft. This minimizes the effects of retiring aircraft to the warfighter. The net fleet reduction of 11% TAI degrades availability by 7% and sortie generation by only 4-5% averaged over the first 30 days of a war fight using the Sortie Generation Model.

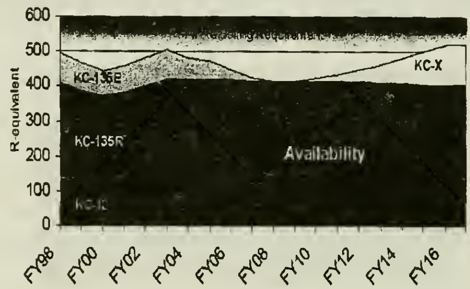
Because this case retains the crews and maintenance personnel, the sortie generation capability will not be reduced a commensurate amount. The initial thirty-day average sortie generation capability reduction ranged from 0% to 5%. The long-duration cases resulted in 0% to 1% sortie loss, while the short-duration cases resulted in losses of 4% to 5%. Since the average sortie duration of future wars is unknown, the worst-case results were the defining case.

Historical comparison: The team compared the predicted capability of this case during FY06-FY09, to the historical capability during FY99–FY01 and found the same R-equivalents available. From FY99–FY01, the KC-135 flow days grew dramatically. Also during this time, the Air Force fought Operation ALLIED FORCE (the largest use of air refueling assets since Operation DESERT STORM), and grounded 40% of the KC-135 fleet due to stabilizer trim actuator inspection failures. Continued operations between FY99-FY01, with 400-469 R-equivalents available, were possible because of an "overage of crews." With the programmed active duty crew ratio of 1.36, and 222 PAA aircraft, the active duty had 302 aircrews available. However, during 1999, approximately 53 active duty aircraft were in depot status. Therefore the 302 active duty crews performed the mission with 191 available aircraft and an effective crew ratio of 1.6.

Case 2: Retire all KC-135E Models by FY08

In this case, the Air Force loses 23% of TAI, 16% of availability and 10% of sortie generation capability. This case generates the greatest cost savings; however, it also generates the highest risk by falling significantly below the air-refueling requirement by an average of 46 R-model equivalents for 12 years.

Total Fleet in R Model Equivalents



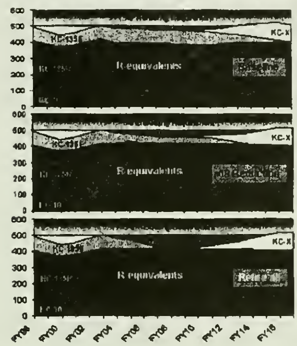
In this comparison, the initial thirty-day average sortie generation capability reduction ranged from 0% to 10%. The long-duration cases resulted in approximately no sortie loss, while the short-duration cases resulted in losses of 10%. Since the average sortie duration of future wars is unknown, the worst-case results were the defining case. These results are directly applicable during the year 2008, the only year in the analysis with the full 82 R-model equivalent differential from the baseline, and no KC-X aircraft coming on line. During other years, the reduction in capability would be less.

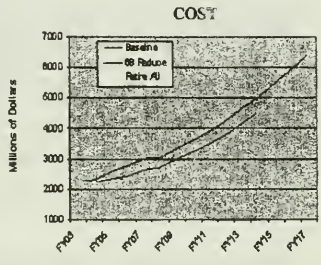
VII. SYNTHESIS

Choosing the best option for the USAF refueling fleet involves weighing the risks associated with the loss of refueling capability against the potential cost savings. Ideally, the best possible option is the greatest air refueling capability at minimum cost. However, in the KC-135 Business Case Analysis, this isn't an option; each case involves lesser capability than today, and at a greater cost. The objective then is to determine which case provides the best tradeoff of cost and capability risk. The cost and capability factors for each case have been analyzed. It is now beneficial to look at each case as a whole and evaluate possible tradeoffs. The following graphs were presented in the cost and capability sections of this report.

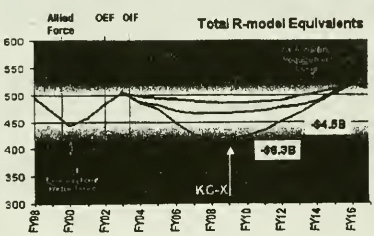
CAPABILITY

(Baseline – top, 68 Reduction – middle, Retire all – bottom)





The chart below combines the capability graphs of the three cases into one picture. It reflects the total loss in R-model equivalent aircraft and the associated cost savings for each option.



Baseline: FY04 PB without 68 KC-135E Reduction

The Baseline Case refueling capability is displayed as the black line. The chart shows historical availability (in R-model equivalents) dating back to 1998, which includes the depot backlog in 1999-2001. The depot backlog coupled with an aggressive Pacer CRAG cockpit and avionics upgrade, significantly reduced availability during this time. Future availability (beyond the FY03 peak schedule) for the Baseline Case reflects a decline in availability again. This reduction in availability is largely a result of 1) rising modification schedule (GATM, LAIRCM, KC-135E Engine Struts) and 2) increasing depot-level maintenance tasks resulting from aging aircraft. These two factors will cause a decline of ten R-model equivalents over the next five years. Declining availability will continue to plague the KC-135 fleet as it ages, and modernization programs are required to operate in the future global airspace.

Case 1: FY04 PB—68 KC-135E Reduction

Reduction of 68 KC-135Es is shown in the preceding figure as the blue line. The availability for this case declines a maximum amount of 36 R-model equivalents from the baseline. The loss in capability in R-model equivalents remains stable at approximately 30 for approximately seven years (FY06-FY12). This case saves $4.5 billion over the baseline for the BCA study period. This represents 8% cost savings over the base case while retiring 11% of the total KC-135 fleet. Additionally, the capability loss of retiring 11% of the fleet is mitigated by retaining most of the aircrew and maintenance personnel, reducing the average sortie generation loss to only 4-5% over the first 30 days of a conflict. It is important to note that even with reduction of 68 KC-135Es, the USAF still would have more available tankers than in FY99 when engaged in the air war over Serbia, or in FY00 when the CSAF directed AFMC to reduce the number of depot-possessed tankers.

Case 2: Retire all KC-135E Models by FY08

Retire all KC-135Es by FY08 is shown in the above figure as the red line. The rapid retirement schedule in this case creates a maximum decline in availability of 82 R-model equivalents in FY08, maintains a deficit of greater than 70 aircraft for four years (FY07-FY10), and has a deficit of greater than 30 aircraft for 10 years (FY05-FY14). This case presents significantly greater risk, but also saves $6.3 billion over the baseline for the BCA period. This represents 11% cost savings over the baseline while retiring 23% of the total KC-135 fleet. In comparison with Case 1, this reflects only 3% additional savings with 12% greater loss of the total KC-135 fleet. Some capability loss of retiring the fleet is mitigated by retaining most of the aircrew and maintenance personnel, resulting in an average sortie generation loss of 10% over the first 30 days of a conflict.

In order to fully address the cost vs. capability tradeoff, more information is needed beyond total dollars saved and maximum loss in capability. Due to the inability to forecast future conflict, a metric balancing risk and cost savings over time is an important measure. The final measure used to determine the benefit of retiring the KC-135Es is the cost savings per average availability loss in R-model equivalents. This measure not only addresses the maximum loss in capability, but it also addresses the total loss in capability over time. Case 1 reflects a savings of 180 million dollars per available R-model equivalent. Case 2 reflects a savings of 137 million dollars per available R-model equivalent.

The table below summarizes information for each of the cases. Dollars are in TY.

Case	Cost $M	Total Savings $M	NVP $M	Min Avail (R-Equiv)	Max Avail Delta (R-Equiv)	Sortie Rate Loss	Avg Delta (R-Equiv)	Savings per Avg R ($M)
Baseline	$56,300	$0	-	495	0	0	0	$0.0
68 KC-135E Reduction	$51,800	$4,500	$3,200	465	-36	4-5%	-25 (5%)	$180.0
Retire all Es by FY08	$50,000	$6,300	$4,600	416	-82	10%	-46 (10%)	$137.0

In summary, the savings per loss in capability is significantly greater in Case 1 than in Case 2. Or, in other words, reducing the fleet by 68 KC-135Es produces a better cost-capability tradeoff than retiring all the KC-135Es by FY08--it provides a proportionally greater cost savings for a much smaller loss in capability.

Case 1, 68 KC-135E Reduction, is the best balance of cost savings and refueling capability based on information available today. However, if costs grow above forecast levels or significant changes in availability arise such as the result of a catastrophic fleet-wide failure, then the projected cost-capability tradeoff would also change, and it may be necessary to retire the entire KC-135E fleet despite the potential bathtub created before a KC-X replacement.

VIII. SUMMARY

Ideally, the USAF would be able to maintain the entire KC-135 fleet to maximize refueling capability until a follow-on aircraft enters the inventory. However, in the budget-constrained environment of today, the USAF must determine if it is viable to retire the aging KC-135E models in order to save constrained funds for recapitalization. In the worst-case scenario, the USAF would continue to fund ever-increasing costs associated with an aging fleet with declining availability. Eventually the USAF would be forced to start retiring KC-135Es to stay within budget and would not have any funds left for recapitalization.

The three cases considered in the business case analysis recognize the USAF's requirement to fulfill their charge to organize, train, and equip the force-multiplying capability of air refueling for the combatant commanders. Faced with a thirty-year recapitalization process, upward spiraling annual maintenance/operations costs, and downwardly spiraling annual availability, the USAF has assessed the cost and benefits of retiring the oldest, least capable air refueling tankers, and reallocating their aircrew and maintenance personnel to increase the availability of the remaining KC-135 fleet.

A decision to reduce 68 KC-135Es is a smart risk management step. Increasing maintenance costs and decreasing reliability and maintainability, in light of future expectations, have already reached the point where it no longer makes sense to continue investing limited resources to keep the oldest and least capable KC-135E tankers flying. The Air Force simply cannot accept the risk of unknown systematic failures that could ground the tanker fleet and cripple the global reach of US and coalition forces. Corrosion damage is driving bills that the USAF has not budgeted for and, in the end, would only be an interim fix. Reinvestment of resources generated by reducing the KC-135E fleet by 68 aircraft allows for increased crew ratio and flight hours on the remaining tankers. These changes give us higher utilization rates on the remaining fleet, mitigating the impacts of retiring aircraft.

In summary, the results of this business case analysis support the Air Force's FY04 PB initiative to reduce the KC-135E fleet by 68 Primary Assigned Aircraft: retiring 61 and moving the other 7 to Backup Aircraft Inventory. Compared to the baseline, this case avoids $4.5B, while causing only a 4-5% reduction in average sortie generation rate and a 5% loss in availability (averaging 25 R-equivalents). In present value terms, the savings would be about equal to the flyaway cost of 22 new KC-767s or 13 new C-17s.

APPENDIX A

Acronyms and Terms

AD - Active Duty

BAI - Backup Aircraft Inventory (Aircraft above the Primary Aircraft Inventory)

BCA - Business Case Analysis

DNIF - Duty Not Including Flying

GATM - Global Air Traffic Management

LAIRCM - Large Aircraft Infrared Countermeasures

MDS - Mission Design Series

MSR - Major Structural Repair

NMC – Non-Mission Capable

PAA - Primary Aircraft Authorization

PAI - Primary Aircraft Inventory (Aircraft assigned to meet the primary aircraft authorization)

PDM - Programmed Depot Maintenance (Scheduled depot level maintenance planned on the aircraft to maintain serviceability)

Reduction - Refers to aircraft that are taken out of the Primary Aircraft Inventory. In this analysis, some of the aircraft are retired and some are put in Backup Aircraft Inventory

SIOP - Single Integrated Operations Plan

SPO - System Program Office

TAI - Total Aircraft Inventory (All aircraft in inventory. Includes PAI and BAI)

TF - Training Fleet

USP - Unit Sales Price (Price charged to the customer for PDM)

UDLM - Unscheduled Depot Level Maintenance (Depot level maintenance required for an aircraft that is not planned, i.e., unanticipated failures)

APPENDIX B

Decision Criteria for Retirement of 61 KC-135Es

The following criteria was used by the Air National Guard, with input from the System Program Office, to help identify which specific tail numbers should be retired:

- Mission Design Series (MDS) and year group – early model and unique MDS tankers
- PDM dates - aircraft nearing PDM input date
- Structural issues - aircraft without structural improvements
- Modifications – aircraft not modified to latest configurations
- Flying hours – higher time aircraft
- Basing history – aircraft stationed in corrosive environment
- Topcoat status – condition of remaining fuel tank topcoat

Although these criteria were used to determine the specific aircraft tail numbers to retire, that detailed view is beyond the scope of this analysis and has no impact on the cost versus capability trade-offs discussed in this business case.

APPENDIX C

Tanker Requirements

The baseline requirement for the Air Force's contribution to air refueling is defined in the Tanker Requirements Study for Fiscal Year 2005 (TRS-05), completed February 2001. Air Mobility Command (AMC) conducted TRS-05 in partnership with the Office of the Secretary of Defense Program Analysis and Evaluation (OSD (PA&E)) division. The study was conducted to determine both aircraft and aircrew requirements in the near term.

The total requirement is based on mission roles and scenarios to support the National Military Strategy. The National Military Strategy during the timeframe of the study was based on three major documents: Defense Planning Guidance (DPG) FY99-03, the Joint Planning Document (JPD), and the Joint Strategic Capabilities Plan (JSCP). The planning construct laid out in these documents supported the prosecution of two nearly simultaneous Major Theater Wars (2MTW).

Requirements were quantified for mixes of the following scenarios: Major Theater War scenarios in Southwest Asia (SWA) and Northeast Asia (NEA), the support of the Single Integrated Operations Plan (SIOP), and National Command Authority-directed Special Operations Forces missions. To prepare for a possible shift in the National Military Strategy, a Small Scale Contingency scenario was also included in this mix. The Major Theater War scenarios were those used in the Mobility Requirements Study for Fiscal Year 2005 (MRS-05). OSD and the Joint Staff initiated MRS-05 to examine the appropriate mix of end-to-end lift assets and their required support infrastructure needed to achieve the National Military Strategy. Although sizing tanker force structure was beyond the scope of the MRS-05, the study served as a major driver of tanker force structure requirements.

For many of these scenarios the requirement is predominantly based upon the two basic refueling missions carried out by tankers: the strategic mobility mission (deployment of combat and combat-support aircraft to theater) and the warfighting mission (employment of refueling assets to support strike aircraft on combat missions). Some tankers (KC-10s) were also used in the airlift role during periods of non-peak demand to augment airlift in MRS-05.

The current Air Force refueling fleet is made up of KC-10A (59), KC-135E (133), and KC-135R (411) aircraft (FY02 fleet structure). In order to make an "apples-to-apples" comparison, a common metric is needed to describe the effectiveness of these various aircraft. TRS-05 and other tanker force structure studies discuss the air refueling requirement in terms of KC-135R-model equivalents. The conversion factors used to obtain these equivalencies are strongly based on offload capacity but also take into account tanker compatibility with receivers as well as boom demand of the warfight scenarios. Table 1 identifies these capabilities in R-model equivalents. Table 2 provides the air-refueling inventory in terms of R-model equivalents for the Baseline Case.

Aircraft Type	Factor	Equivalent
1 KC-135R	1.00	100% of KC-135R
1 KC-135E	0.84	84% of KC-135R
1 KC-10A	1.95	195% of KC-135R

Table 1: R-Model Equivalencies

Aircraft Type	Total Aircraft	R-model Equivalents
KC-135R	411	411
KC-135E	133	112
KC-10A	59	115

Table 2: R-Model Equivalencies for Baseline Case

The results of TRS-05 identify a need for 500-600 R-equivalents "available" on a daily basis to meet the wartime requirement. "Available" is defined as aircraft not in a "school house" capacity or depot-possessed. TRS-05 assumes these "available" aircraft meet and maintain the AMC standard mission capable rate (MC Rate = 85%) during wartime, leaving 15% as non-mission capable (NMC). Below, in Chart 1, "available" tails (not R-equivalents) are in the blue and blue-hashed areas.

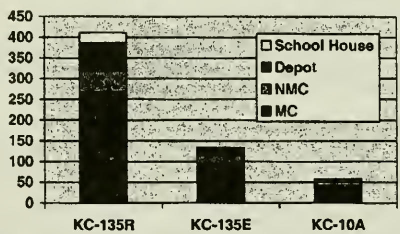


Chart 1: Available Tanker Tails

In Chart 1, the R-model total inventory is shown at 411 with the total number of R-models available for mission requirement at 317. Of these, 269 are available and mission capable while 48 are available but not mission capable. In terms of mission capable aircraft, the requirement ranges from 425 to 510 mission capable R-equivalents (600 x 85% = 510; 500 x 85% = 425). It

is important to note that this is a wartime mission capability. Day-to-day peacetime maintenance management practices often do not sustain a fleet wide MC Rate of 85%. Applying peacetime actual MC Rates does not accurately portray the wartime capability of the air refueling fleet.

Since TRS-05 was completed, the world has changed and so has the National Military Strategy. DPG FY04-09 directs a change from a 2 MTW approach to a 1-4-2-1 force-planning construct described below.

1 - Defend the United States (Homeland Defense)
4 - Deter aggression and coercion in four critical regions
2 - Swiftly defeat aggression in two overlapping major conflicts
1 - Upon President's direction, win decisively against one of the two major conflict adversaries

A new mobility study to include air refueling requirements is needed to further refine the requirement to support this strategy. In the meantime, TRS-05 remains the most comprehensive and widely accepted analysis of current tanker requirements. Therefore, this BCA uses the TRS-05 Range Requirement as the "gradable requirement."

APPENDIX D

Sortie Generation Capacity

Background

The second capability metric addressed in the KC-135E Business Case Analysis is sortie generation capacity. While TRS-05 defines the traditional air-refueling requirement in terms of "Available KC-135R Equivalents," that metric does not fully capture the impact of increased crew ratios (and the resulting higher sortie generation capability) found in the FY04 PB (68 KC-135E Reduction) and retire all E's cases. Although no defined tanker requirement exists at this time in terms of sortie capability and no absolute measure of sortie capability relative to a requirement is possible, the relative sortie capability loss between the various fleet options can be compared to illustrate the relative impact of the fleet reduction in association with the crew ratio increase. The analysis conducted used the Air Force Studies and Analyses Agency (AFSAA) Sortie Generation Model to fly the fleets represented in the baseline, FY04 PB and retire all E's cases. These fleets were flown as hard as constraints permitted, the sortie results were tallied, and the differences compared.

Tool

The Sortie Generation Model is a stochastic model that flies aircraft and crews opportunely based on the given constraints regarding aircraft and aircrew availability. As such, it is not a scheduling or optimization model. It produces expected sorties flown and is supply-driven versus demand-driven. In this application of the model, the primary variables (chosen from defined distributions) on a given sortie are the sortie duration, whether the plane lands broken, the length of time the plane remains broken, and whether the aircrew is temporarily unavailable (Duty Not Including Flying, staff duties, etc.).

Assumptions

The analysis of the operational impact of the two fleet cases compared the maximum wartime sortie generation capabilities of the complete KC-135 fleets (baseline vs. FY04 PB, baseline vs. retire all E's). Some of the basic assumptions were:

- All aircrew and maintenance support associated with retired aircraft are kept and applied to the remainder of the KC-135 fleet.
- The following values were used as inputs to the Sortie Generation Model to determine the probability of an aircraft landing broken.
    - Wartime Mission Capable Rates (Active Duty KC-135R - 84%; Air Reserve Component KC-135R - 82%; Air Reserve Component KC-135E - 80%).
    - AMC standard "time to fix" distribution
    - Expected average sortie duration
- AMC Flying Hour Limits: Thirty-day limit waived from 125 to 150 hours. Ninety-day limit remained at 330 hours.

- Aircrews considered unavailable to fly 14% of the time due to DNIF, staff duties, etc., per TRS-05.

Methodology

In each fleet comparison, the Sortie Generation study looked at four representative cases resulting from varying the two variables: sortie duration and a decision to deploy the schoolhouse. (The decision to deploy the schoolhouse impacts the reconstitution of the force and is a step not taken lightly.) The four cases do not bound the problem but provide a range of possible impacts. Sortie duration is drawn from a triangular distribution with characteristics defined below.

- A short sortie duration distribution would represent a war fight scenario where the geography, threat or politics allowed tanker basing near the fight.
- A long sortie duration distribution would represent a scenario with more anti-access characteristics.
- A future tanker force must be prepared to fight in either case.

Sortie Generation Model Capability Analysis Cases

– Short Duration	[Hours =	Min: 3	Mode: 4	Max: 6];	Deploy the Schoolhouse
– Short Duration	[Hours =	Min: 3	Mode: 4	Max: 6];	Don't Deploy the Schoolhouse
– Long Duration	[Hours =	Min: 5	Mode: 7.5	Max: 9];	Deploy the Schoolhouse
– Long Duration	[Hours =	Min: 5	Mode: 7.5	Max: 9];	Don't Deploy the Schoolhouse

1. The Sortie Generation study started with the fleet (aircraft and crews) associated with each case (baseline, FY04 PB and retire all E's).
2. Expected aircraft in Programmed Depot Maintenance, Unscheduled Depot Level Maintenance and Modifications reduced the available aircraft.
3. Each fleet (available aircraft and crews) was subdivided into Active Duty, Air National Guard and Air Force Reserve Command components.
   - These three components were then scaled down to representative units--with sizes ranging from 16 to 36 aircraft.
4. These representative units were flown multiple times in the Sortie Generation Model to produce an average number of sorties flown on each day of a 120-day effort.
5. The results for each representative unit were scaled back up to component size to obtain each component's sortie contribution.
   - Then, the number of sorties flown by each of the components was added to obtain the total fleet sorties flown on a given day.
6. For each fleet, the sortie count was averaged over time, and the average for a given time period was compared to obtain a percent sortie generation reduction.
   - The period chosen for the business case analysis was the average over the initial 30-days of the war fight.

Although capability reduction was higher over shorter periods, the capability reduction was less over the entire duration of the war fight (120 days). It is also critical to note that this capability differential is a comparison of the fleets at maximum differential. As the proposed changes are phased in over time, the capability reduction will reach the values presented for only a limited duration. During other years, the reduction in capability will be less.

Why does increasing a crew ratio increase aircraft utilization?

The optimal crew ratio is one where the capability of the total crew force equals the capability of the aircraft fleet. Historically, the KC-135 crew ratios were set at 1.36 Active Duty and 1.27 ARC to perform the single integrated operations plan (SIOP) mission. Multiplying this ratio by the number of primary aircraft assigned (PAA) gives a total crew force.

The Tanker Requirements Study (TRS-05) identified both a tanker aircraft and crew shortage based on the FY99-03 Defense Planning Guidance. The TRS further recommended a 1.75 crew ratio for the KC-135. A lower crew ratio limits the capability of the fleet based on available aircrews. Increasing the crew ratio to approximately 1.75 balances aircraft and aircrew capabilities.

In Case 1, 68 KC-135E Reduction, most aircrews are re-invested in the remaining tanker fleet matching aircraft and aircrew capability. The results from the Sortie Generation Model verify TRS-05; a greater relative shortage of crews exists than aircraft. This explains why reducing the fleet by 11% reflects a reduced loss in sortie generation. In Case 2, retire all, the crew ratio is enhanced above 1.75; however, further gains in aircraft utilization are not achieved. This is because the aircrew capability in this scenario exceeds the aircraft sortie generation capability.

APPENDIX E

KC-135 Re-engine Synopsis

Background
The business case analysis on KC-135 did not include an analysis of re-engining the KC-135Es because it had already been rejected by the USAF and OSD as a very costly, ineffective, and unviable option. The following is a synopsis of the latest study on re-engining of KC-135Es.

In the Jan 03 timeframe, The Tanker Recapitalization Issues Group (TRIG) was formed within the Air Force. The team was led by AF/XPP and consisted of representatives from AF/IL, AF/XP, SAF/AQ, SAF/FM, AF/XO and AFSAA. Their immediate goal was to prepare responses to questions from OSD PA&E.

An analysis was conducted to look at the option to re-engine the KC-135Es as a bridge to recapitilize the fleet, as compared to the case for a new replacement tanker. The TRIG and OSD/PA&E also toured the OC-ALC PDM facilities to observe the corrosion problems plaguing the KC-135 line first hand. The tour clearly demonstrated to the TRIG and PA&E why re-engining was not going to further the DoD capabilities.

Discussion
The 1950 vintage technologies and materials used to build the KC-135 are, some 40+ years later, degrading aircraft structure, causing vast increases in the Programmed Depot Maintenance (PDM) effort. Additionally, approximately 40% of PDM hours for the KC-135E are for aging aircraft problems. Lastly, Major Structural Repairs (MSRs) on the KC-135Es in PDM were rare in 1990, averaging 1 MSR for every 3 to 4 aircraft; today they are common, averaging 2 to 3 per aircraft, but in some cases it has been as high as 10 per aircraft. As an example, the wing attachment fitting experienced critical corrosion in the wing attachment pin hole. Prior to improving the pin hole seal, water could enter and get trapped in the pin hole causing corrosion. This MSR cost the using commands over $500K per fix.

Close-Up Picture of Severe Strut Corrosion

As critical as the major structural issues are, the engine strut corrosion problem is the most pressing problem. In 1982-1990, TF-33 engines and struts were removed from retired commercial 707 aircraft (with an average 60,000 flight hours) and, as an interim upgrade, installed on KC-135A aircraft (thus becoming a KC-135E aircraft). This action was taken

pending the decision to perform the extensive re-engining effort required to convert them to KC-135Rs.

In 2000, severe corrosion was observed after the partial disassembly of 16 of these KC-135E engine struts during PDM at Boeing Aerospace Service Center (BASC). SPO/Boeing engineering estimated some struts at/near a zero margin of safety and developed an interim repair that must be performed no later than Sep 04 at a cost of $150K per aircraft. Until this is completed, the KC-135Es must operate under a flight restriction. This repair should allow the struts to fly up to 5 years until they must be replaced at a cost of $2.9M per aircraft.

Baseline Tanker Age
There are three measures used to assess aircraft service life: Usage (metric is flight hours), Utility (Suitability to accomplish its intended mission), and Age (measured in years). The TRIG concluded that the most critical KC-135 tanker metric is age. The most pressing KC-135 problems are corrosion and stress corrosion cracking--both age related. Stress corrosion cracking is one of the most difficult structural failures to predict. One can only predict this type of failure by essentially "cutting" into the actual member and performing destructive inspection. These types of failures are largely unpredictable and as the aircraft ages, the number of material failures will also be unpredictable.

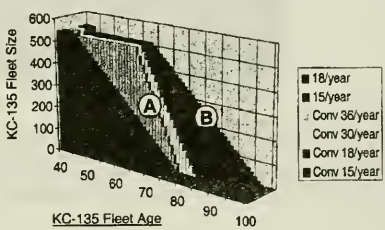
Recapitalization
Current fiscal realities make it difficult to purchase large aircraft at a rate higher than 15-18 per year. At this rate, replacing 544 aircraft will take more than three decades. The following chart depicts the growing age of the KC-135 fleet along with the fleet size when recapitalization takes place at these rates. Even if recapitalization starts now, some of the KC-135 aircraft will approach 80 years old before retirement.

An R-model conversion exacerbates the recapitalization problem considerably. The significant investment ($3.87B for 100 aircraft) will take decades to pay for itself. By pushing replacement back two decades (payback would quite likely take longer), the USAF would be left with one of the following two scenarios:

A. Double the procurement schedule (fiscally unrealistic) to keep fleet age under 80 years (yellow).
B. Operate 100 year old aircraft (red).

The figure below graphically depicts these two scenarios along with recapitalization starting now (green).

Recapitalization Challenges



Both of these scenarios pose unacceptable long-term risk to the refueling fleet. Therefore, converting the E-model fleet to R-models is not a viable option.

Conclusion

The Air Staff-led TRIG presented an analysis of re-engining to OSD PA&E and the Tanker Leasing Panel in Feb 03. The option to re-engine was rejected because:

1. It is not an effective way to increase warfighter capability, due to critical aging concerns with respect to corrosion.

2. Re-engining the oldest fleet in the Air Force delays the replacement of future tankers without associated cost payback.

3. It would leave "tired iron" in the inventory that would cost the Air Force in mission capable jets and excessive PDM costs.

The Air Force and OSD's position is that recapitalization needs to begin as soon as possible. This recapitalization should begin with the KC-135E, the oldest and least-capable tanker.

APPENDIX F

KC-135E Business Case Analysis

Participating Organizations

AF/ILMY
AF/ILPY
AF/XORM
AF/XPPM
AFMC/LGP
AFSAA/SAFM
AMC/XPY
OC-ALC/LC
OC-ALC/MAF
SAF/AQQ
SAF/FMC

DISTRIBUTION:

SAF/OS
SAF/US
AF/CC
AF/CV
AF/CVA
AF/IL
AF/XO
AF/XP
AFMC/LG
AFSAA/SA
AMC/XP
OC-ALC/CC
SAF/AQ
SAF/FM
SAF/LL

Contact SAF/AQQ for additional copies of this report.

Senator LEVIN. You say in your testimony that: "By 2000, 32 percent of the KC–135 fleet, a significant portion of this Nation's overall Air Force refueling capability, was unavailable due to program depot level maintenance and this reduced the refueling capability of our warfighters and caused a backlog at the depot facilities, as the average number of days in depot-level maintenance peaked at over 400 days." That is your testimony.

Secretary ROCHE. Yes.

Senator LEVIN. You used 2000 instead of the current depot level maintenance period. Why did you go back to 2000, since that period is now significantly better than it was in 2000?

Secretary ROCHE. The 2000 number was used, as I recall, Senator, because that was comparable to the prior work, the 2001 study which used data around that time. Subsequent to that, the depots have become far more efficient. We move things through. But the amount of the work package that goes to each 135 is still increasing.

Senator LEVIN. Is it true that in a number of ways there have been improvements since 2000? Let me just read to you some of those ways. The number of KC–135s in the depot now stands at 91, which is down from 171 aircraft 3 years ago; is that true?

Secretary ROCHE. Yes, it is.

Senator LEVIN. Is it true that the number of KC–135 aircraft are now spending roughly 200 days in the depot on the average, down from approximately 400, the figure that you used?

Secretary ROCHE. Yes, it is.

Senator LEVIN. Is it true that now the aircraft are requiring roughly 31,000 man-hours of work in depot, down from a peak of 36,000 man-hours in 1999?

Secretary ROCHE. Yes, sir. It is a tribute to the depot, not to the aging of the aircraft.

Senator LEVIN. All right. Is it true that the mission-capable rates for the fleet have risen from slightly less than 71 percent in 2000 to more than 79 percent now?

Secretary ROCHE. Those numbers differ, sir, in terms of which models. It is roughly 78 percent.

Senator LEVIN. I mean the total.

Secretary ROCHE. The standard is higher.

Senator LEVIN. I talk about the total fleet there.

Secretary ROCHE. The total 135 fleet.

Senator LEVIN. Right; is it true that the mission-capable rate for the total fleet has risen from slightly less than 71 percent in 2000 to more than 79 percent now?

Secretary ROCHE. It is not 79. I think it is like 78. But it has risen, and one of the reasons is a lot of spare parts have been made available.

Senator LEVIN. Thank you.

My time is up. Thank you.

Chairman WARNER. Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

I want to repeat again, no analysis of alternatives was conducted. The Institute for Defense Analyses, who will testify later on, who did a study at the request of the Air Force, concluded that these

were overpriced. That, as far as the authors of that study know, their recommendations were just disagreed with.

Secretary Roche, if you did another analysis that would rebut the Extended Service Life Study (ESLS), it has not been made available to this committee. I would be very interested in seeing that. In your response to Senator Levin, you said that an intensive study was done. We have not seen anything of that nature.

Secretary ROCHE. I agree, Senator. It is in bits and pieces, and we tried to go back and see——

Senator MCCAIN. Why did you not just do another analysis? If you did disagree with the analysis, then you had plenty of time to do another analysis, a comprehensive one, just like you refused, apparently at the behest or certainly in keeping with the objectives of Boeing, to avoid an AOA being conducted. An AOA was not conducted. It is normal, it is routine, to do an AOA, and you did not do it.

Secretary ROCHE. May I address that, Senator?

Senator MCCAIN. Sure.

Secretary ROCHE. Senator, I have no idea, nor have I seen anything from Boeing saying they were trying to work against doing an AOA.

Senator MCCAIN. I would be glad to show you this.

Secretary ROCHE. No, sir, I am sure what you have is there. I am telling you that was never communicated to me by Boeing. There was a discussion of whether or not to do an AOA with the Under Secretary of Defense for Acquisition, people from Program Analysis and Evaluation (PA&E), Service Chiefs, the Under Secretary of Defense. We discussed it as to whether it was necessary or not. The authority for doing it is not a requirement. It is a best practice which has emerged and there are examples where it has not been done.

The authority to decide or not is the Under Secretary for Acquisition. In this discussion it was felt for the purpose of this lease there was no reason to do more. However, I think——

Senator MCCAIN. That is remarkable. That is a remarkable statement and a remarkable decision in view of the magnitude of this acquisition, and I would argue that no initial acquisition of this size has ever been done in recent years without an AOA, and I would be glad to supply that for the record.

[The information referred to follows:]

TKR 011 0116

Boeing Proprietary

This document may contain trade secrets or confidential/proprietary/commercial/technical/other business information. Unauthorized disclosure prohibited by law.

Acquisition

Element: ORD — Owner: Gower

Objective	Near-Term Actions	
• Establish clearly defined requirements IN ORD for the USAF Tanker configuration that results in an affordable solution that meets the USAF mission needs and will prevent an AoA from being conducted	• USAF ILS meeting	Feb 6
	• Daniels meeting on early start	Feb 14
	• Price 150 items for CAIV analysis	Feb 23
	• USAF CAIV meeting	Feb 27
	• OSD agreement that is USAF program	TBD
	• AMC ORD approval	TBD
	• USAF ORD approval	TBD

Issues / Concerns

- USAF configuration different than GTTA
- Tight proposal/negotiation schedule to get 150 additional changes defined and priced
- Potential exists for affordability problems
- Too robust USAF configuration may cause resale difficulties in the unlikely event USAF would return aircraft
- Program go-ahead required March 1 to meet schedule

DRAFT

2/6/02 — Boeing Proprietary — 1

Senator McCain. Mr. Chairman, I received a letter from Mr. Daniels, the former Director of the OMB, on August 1, 2002. First of all, Mr. Kaplan, you state in your previous statement it will cost more to lease than it is to buy, right?

Mr. Kaplan. That is right, Senator.

Senator McCain. I quote from Mr. Daniels' letter: "I believe it would be inconsistent with OMB Circulars and irresponsible to support any lease proposal which would cost taxpayers more than direct purchase. While it may seem appealing to spread out funding, the excess cost will inevitably crowd out funding for essential warfighting needs. We would strongly oppose any effort to alter or manipulate scoring rules and leasing procedures which have served taxpayers so well."

What has changed, Mr. Kaplan, besides we have a new Director of the OMB, since Mr. Daniels wrote me that letter?

Mr. Kaplan. A couple things, Senator, if I may. First of all, the deal was approved under Director Daniels, not under the new Director of OMB, although the new Director supports it as well.

Second of all, the deal has changed significantly since Director Daniels wrote that letter to you, Senator, in August.

Senator McCain. It will not cost more to lease than to purchase?

Mr. Kaplan. It will, but by less than $2 billion difference from when that letter was written.

Senator McCain. Only $2 billion, I see. But Mr. Daniels said it is irresponsible—by the way, CBO, GAO, and IDA all disagree with it. They say it is $5 billion. But you are free to disagree with those numbers.

Mr. Kaplan. I think I just——

Senator MCCAIN. I want to know what has changed since the objection to any leasing arrangement which costs more than purchase?

Mr. KAPLAN. If I may, Senator, the $2 billion I was referring to was the reduction in price of the aircraft that was negotiated in part by Director Daniels', I think appropriately, skeptical approach to this deal, as reflected in the letter he wrote to you. So that is the $2 billion decrease in the price, which is a decrease in the cost to taxpayers.

That is a very significant change from when Director Daniels wrote that letter, and I think Director Daniels would not have approved the deal had very difficult negotiations not achieved substantial cost reductions.

Senator MCCAIN. It is still costing more. So Director Daniels did not tell me the truth, because he said he would strongly oppose any leasing arrangement that costs more than a direct purchase, because that is what he said. That is what he said to me in the letter. Obviously, we now approve of a lease which would cost more than a purchase, so either Mr. Daniels—in other words, Mr. Daniels did not tell me the truth in his letter.

Mr. KAPLAN. I would not characterize it that way, Senator.

Senator MCCAIN. Pardon me?

Mr. KAPLAN. I would not be in a position to be prepared to characterize——

Senator MCCAIN. But when he said he would never approve of a lease that is more expensive than a purchase, what does that mean?

Mr. KAPLAN. Senator, it means that this was an ongoing, extended process of negotiations and Director Daniels was in negotiation——

Senator MCCAIN. It means to me he would have never approved—I hate to get argumentative, but it says "I believe it would be inconsistent with the OMB Circulars and irresponsible to support any lease proposal which would cost taxpayers more than direct purchase." This costs the taxpayers more than direct purchase, so Mr. Daniels did not tell me the truth in the letter that he sent to me.

But let us go on here. "After analyzing the Air Force's report and receiving additional information"—this is CBO's assessment of the Air Force's plan—"about the proposed lease from the Air Force and Boeing, the Congressional Budget Office has concluded that the transaction would essentially be a purchase of the tankers by the Federal Government, but at a cost greater than would be incurred under the normal appropriation and procurement process. The special purpose entity that has been established to buy the aircraft would in fact be substantially controlled by and act on behalf of the Federal Government, and its transactions should be reflected in the Federal budget. Even if one were to view the arrangement as a lease, CBO's analysis indicates that the proposal does not meet the guidelines for an operating lease described in the Congressional scorekeeping guidelines and in OMB Circular A–11 and thus does not comply with the terms of section 8159 of the Department of Defense Appropriations Act of 2002."

Now, you are claiming there is some kind of ambiguity. What is ambiguous here, Mr. Kaplan?

Mr. KAPLAN. The ambiguity lies in the criteria, not in CBO's statement. I think there is ambiguity in how you determine fair market value. I think there is ambiguity in what constitutes a general purpose aircraft. There is ambiguity in a private sector market.

Senator MCCAIN. Is the entity being substantially controlled by and acting on behalf of the Federal Government and its transactions being reflected in the Federal budget, yes or no?

Mr. KAPLAN. No, we do not believe the special purpose entity (SPE) is a part of the Federal Government, and as a result its transactions should not be reflected in the Federal budget.

Senator MCCAIN. Is it substantially controlled by and acting on behalf of the Federal Government?

Mr. KAPLAN. It is controlled by the trustee, who is an employee of the Wilmington Trust Company. The Air Force does have a seat on the financing board and so as a result does have a say in the lease terms and the activities. The purpose of the SPE—and Senator, this is one of the areas where I think OMB asked a number of questions in order to satisfy itself is to ensure that there was a lower interest rate achieved on the bonds, and that translates into a reduced cost to the taxpayers. So the SPE's purpose is to reduce the cost to the taxpayers.

Senator MCCAIN. Is it of interest to you that the CBO, the GAO, the CRS, and every objective observer in the financial markets agree that this is an entity substantially controlled by and acting on behalf of the Federal Government? Is that of any interest to you, Mr. Kaplan?

Mr. KAPLAN. Yes, Senator.

Senator MCCAIN. I thank you, Mr. Chairman.

Chairman WARNER. Senator McCain, might I suggest that the letter of Mr. Daniels be copied and given to Mr. Kaplan, so that he could reflect on it a few minutes and maybe come back with a response to your important question.

Senator MCCAIN. I would be glad to. I thank you.

[The information referred to follows:]

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

THE DIRECTOR

August 1, 2002

The Honorable John McCain
United States Senate
Washington, D.C. 20510

Dear Senator McCain:

Thank you for your letter on FY 2002 and 2003 provisions bearing on the Air Force's potential leases of B-737s and the B-767s. From OMB's perspective, there is a clear distinction to be drawn between the two proposals. In fact, the fashion in which the B-737 proposal meets appropriate financing standards underscores by contrast the defects of the B-767 idea.

After lengthy discussions with the Air Force, we have submitted a reprogramming which supports the lease of the B-737s. This arrangement meets two key requirements of OMB circular A-11: (1) the lease payments constitute no more than 90% of the value of the asset (the aircraft); and (2) the asset is commercial in nature and not designed to meet unique government purposes.

Of equal importance, all costs for FY 2002, including termination liability, have been fully covered by the reprogramming request of $37.2 million submitted to the Congress. In the future, the B-737 proposal will continue to be scored according to the A-11 rules on operating leases and, therefore, will require an annual appropriation. Termination liability funds must be included in the annual assessment of lease costs in order to protect taxpayer interests in the event that an appropriation is not available or the government no longer requires the aircraft.

Under A-11, purchase options are allowable in operating leases as long as they do not commit the government to purchase and as long as the purchase is at the fair market value of the asset at the time the option is exercised. In this case the prices quoted in the contract are fair market value for this type of aircraft after five years of use. Therefore, as long as the Air Force provides the required funding to purchase the aircraft up-front if and when it decides to exercise the option, it can do so without violating the A-11 requirements for an operating lease. The lease is also consistent with Section 8159 in this regard since the purchase option requires separate authority in order to be exercised.

Circular A-94 requires agencies to conduct an economic analysis of different procurement strategies using reasonable assumptions that are not chosen to favor one approach over another. In other words the comparison must done using a 'level playing field'. The assumed Air Force purchase price for the aircraft was based on actual Air Force experience in purchasing C-40 aircraft. While it may be possible to obtain a slightly better price in new negotiations, using this price in the A-94 analysis is reasonable and, therefore, not objectionable.

I should note that the Air Force did not compete the proposal because Section 8159 specified Boeing 737 aircraft. However, the Air Force complied with the provisions of the Competition in Contracting Act concerning the requirements for sole source procurements.

OMB would not agree to any lease or programming of funds which did not meet these requirements. We believe the current proposal and reprogramming we have submitted to the Congress for B-737s conforms with OMB circulars and policy.

On the other hand, all current discussions between OMB and the Air Force on the B-767s indicate it is unlikely that a proposal can be crafted which complies with these principles. Our discussions have suggested the costs of an operational lease of B-767s would substantially exceed any purchase price. Further, B-767s reconfigured as tankers would be designed for unique government purpose and not be commercially viable. Finally, while we are not at this stage of discussion, full termination liability cost protection must be included in any proposal considered by OMB.

The age and capabilities of the Air Force tanker fleet must be evaluated in the context of all Air Force and national security priorities. To date, the Air Force has not formally identified new tankers as a priority requiring immediate funding.

I believe it would be inconsistent with OMB circulars and irresponsible to support any lease proposal which would cost taxpayers more than direct purchase. While it may seem appealing to spread out funding, the excess cost will inevitably crowd out funding for essential war fighting needs. We would strongly oppose any effort to alter or manipulate scoring rules and leasing procedures which have served taxpayers so well.

Sincerely,

Mitch Daniels

Mitchell E. Daniels, Jr
Director

Chairman WARNER. Thank you.

Senator Akaka.

Senator AKAKA. Thank you very much, Mr. Chairman.

Secretary Roche, I am concerned about the maintenance aspects of the proposed leasing arrangement and also the implications it would have for the Title 10 requirements. 50–50, at least 50 percent of maintenance be performed in public depots. What assumptions were made about tanker maintenance and the Air Force's long-term strategy?

Secretary ROCHE. Senator, in terms of the short-term we are going to use contractor logistics support because there is a warranty and these are aircraft under lease. Over the long term, it is our intent, as we are trying to do with the C–17s, to migrate maintenance to a partnership between one of our ALCs and the original equipment manufacturer, so that we can maintain Title 10 capabilities and get the best of both worlds.

Where we have been able to partner with our ALCs and the company, we have benefited across the board. The ALC has benefited and the company has been able to participate, and that has helped us, and that is where we would like to go.

Senator AKAKA. If the lease is approved, how valid are those assumptions?

Secretary ROCHE. Sir, these we believe are policies of the Air Force and we would go forward with them. These aircraft, if they were purchased at the end of the lease period by the Air Force, we would start to migrate those towards one of our ALCs in a partnership with the original equipment manufacturer. We have done that with the KC–10 and we have gotten tremendous results.

In the lease we have a 90-percent mission-capable rate that is guaranteed. Therefore, the contractor has to do a lot to ensure that we can make that 90 percent.

Senator AKAKA. What changes to planned maintenance would be required if the lease goes forward? Will workload that was previously planned to be performed in the private sector have to be brought into the depots, or will planned areas of expertise be shifted among depots in order to accommodate other changes?

Secretary ROCHE. Senator, I do not see a shift. The partnership arrangement in fact increases the expertise at the ALC as well. Because we will be operating some of the 135s well into their 70s, we expect the demand on the depots by the aging 135s will only increase. The depots have become more efficient, but these aircraft are aging and we expect the amount of time spent on corrosion, for instance, to go up by 10 percent just because of the age of the aircraft.

Senator AKAKA. Secretary Roche, I am concerned with the total costs of this proposal, but I am also very concerned about, as you mentioned, corrosion and its effect on our current tanker fleet. What preventive steps will be taken with regard to corrosion?

Secretary ROCHE. We are finding across the board, Senator, especially in the aircraft that are near salt water are affected much faster than the others, and we rotate aircraft out of a salt water environment when we can. So for instance, at McDill Air Force Base we do not keep planes there all the time. We will have them there 6 months, then put in a new set. We are inspecting more. We are assuming there is more corrosion.

As we track it, we are in fact looking at others, and we have formed an Aircraft Viability Board, which is analogous to the Navy Board of Inspection Survey, to go tail number by tail number to get an individual assessment of every single one of our aircraft and start dealing with them as if they were patients in the hospital, to keep track of corrosion by tail number over the long period of time.

Senator AKAKA. Mr. Secretary, has the Air Force budgeted for any other costs that it will incur, for example training personnel?

Secretary ROCHE. Yes, sir. In the package that goes along with the lease there is money for contract logistics support, as well as initial training, initial spares, and they will continue.

By the way, just to make sure, sir, we do keep track of each tail number. This is to be a more in-depth version of keeping track of each tail number, to my earlier point.

Senator AKAKA. Thank you very much, Mr. Secretary.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator Akaka.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

First of all, just for clarification, in the statements you alluded to something like a flow time for the maintenance of each KC–135, without distinguishing between E&R, as being around 400 days, and it is my understanding now that, at least at Tinker, it is 222 days in the last year. Do you disagree with that?

Secretary ROCHE. No, sir. I think the tanker depots have done a magnificent job.

Senator INHOFE. Thank you very much.

It seems like we talk a lot about the 100 aircraft that are there and do not really go beyond that. After the lease is expired, one of two things can happen. You can either return the planes or you can go ahead and re-order more. I think the likelihood is very great that they would re-order more.

I would like to get one option off the table and that is of returning them. Mr. Curtin will be coming up in the next panel and I want to pursue this with him, but he says: "If the aircraft are returned, the Air Force will have to find some way to replace the lost capability even though lease payments would have to be paid almost to the full cost of the aircraft." He goes on to say why that would not be a good scenario.

Do you agree with his statements?

Secretary ROCHE. I do not know the details of the numbers. I know that we have plenty of time to look to see whether these are working as well as we think they will work. If not, we can return them. If so, we would come back to Congress and make that case that we would like to then have authorization and appropriation to purchase.

There is a third option, by the way, Senator. In the way this lease is negotiated, if any time during the construction period we choose to turn it into a buy, we can. So that if in fact there is concern with the long-term lease, we could buy them.

Senator INHOFE. But the point I am trying to get at here is even the likelihood of stopping at 100—and I would probably be supportive. If this thing goes through, we are going to have to be looking for the future and stopping at 100 would not make sense.

In a memo from Secretary Aldridge to you just a short while ago, it says: "It is the intent of the Department to go beyond the initial 100 aircraft as we begin the recapitalization of the airborne tanker fleet." Then again in Aviation Week, he reemphasized that, saying: "We indicated the intent of the government to begin recapitalization of the tanker fleet so it would go beyond the 100 aircraft."

I think that this is realistic, that most likely, that it would, and I think you would agree with that.

Secretary ROCHE. Yes, sir.

Senator INHOFE. But with that in mind, why is it that we do not have a good long-term maintenance and training program that would go with this?

Secretary ROCHE. When we come back in November to the Under Secretary for Acquisition with a long-term strategy, which I doubt will include additional leases because we believe this is a one-time thing, we will also reflect how we would intend to maintain and how we would intend to train.

Senator INHOFE. Senator Akaka brought up this thing on the 50–50 and I understand the response that you gave him. However,

would this not require a change in the law, because if you go back and you have it in an ALC, but it is actually being done in a partnership—which have been successful, I might add—would this not require that you have some type of a change in the law?

Secretary ROCHE. Senator, I am not sure. May I turn to a colleague and ask to answer the question, or may I come back to you for the record.

Senator INHOFE. Just for the record is fine.

[The information referred to follows:]

No, the law does not have to be changed. The 50/50 law—10 U.S.C. section 2466—states that not more than 50 percent of the funds made available in a fiscal year to a military department for depot-level maintenance and repair workload may be used for the performance by non-Federal Government personnel of such workload. In applying the 50/50 law, the value of the work performed by ALC personnel pursuant to a partnership with the contractor will be included in the Government's share. Therefore, a change to the law is not necessary.

Senator INHOFE. Now, I would like to get into the thing on which I have been concerned, after having chaired the Readiness and Management Support Subcommittee for a number of years, in our lift problem that we have in general. I am talking about tankers, I am talking about all types of lift vehicles. When you stop and think of what we did in Kosovo and Bosnia and Afghanistan and of course now Iraq, it has put a tremendous strain and we are right at the capacity, and I think everyone agrees that that is a real serious problem right now.

The reason I bring this up is that when you talk about the existing KC–135s—and I know people like to talk about how old they are and it is going to be 80 years old at the end of this, some of these aircraft, and they will still be in use. That does not really make that much difference. I have flown airplanes in the last 2 weeks that were 60 years old. It depends on how often they are used, how they are rotated. We have studies to show that they could be used for a long period of time.

I bring this up, not just to say that there are alternatives to a lease, but in addition I think we all, everyone in this room who understands the issues, knows that we have a tremendous shortage of tankers and lift capacity. Would you agree with that?

Secretary ROCHE. Our lift capacity is demonstrating great progress, and the 767s would also be lift aircraft because they are good cargo aircraft.

Senator INHOFE. I understand that, but it is today I am talking about—we have a deficiency.

Secretary ROCHE. Our plans show, with taking a look at the C–5s, increasing the life of them, we meet the requirement that the Joint Staff has given us. This would add to our capacity.

Senator INHOFE. What I am getting around to is the 68 that you are talking about retiring. It would seem to me that if we need the capacity out there—let us say the lease goes through. I would like then to look at this thing and re-evaluate what we would want to do with the 68 that they are talking about going into retirement.

We can remember just a short time ago—and I will see if I can find it in here—that the Air Force testified to us—here it is, right here—"With proper maintenance and upgrades, we believe that the aircraft may be sustainable"—we are talking about Es and Rs here—"for another 35 years."

I think Senator Warner mentioned a report that would go all the way to 2040. I think if the need is that great, if this thing does go through, how receptive would you be to re-evaluating what you would want to do with some of the existing KC–135s? I know we are going to have them anyway. I am talking about the 68 that they are talking about going into retirement.

Secretary ROCHE. Our sense, sir, is that retiring those 68 could give us quite a savings. We could always look at your idea, which is different, which is could they be converted to freighters and used as freighters, and we could take a look at that.

Senator INHOFE. Then the last thing I want to be sure to get in the record—I know my time has expired, but—it was brought up by Senator Levin, the mission-capable rates. I happen to have a breakdown of the KC–135 Rs and Es, and they have actually gone up since 2000 or the end of 1999: KC–135Rs from 78 percent to 82 percent; the KC–135Es from 62 percent to 75 percent. That is in the active service, not counting the Guard and Reserve.

So would you disagree with those figures?

Secretary ROCHE. Sir, the Guard and Reserve ones have gone from 64 percent to 74 percent. It is a matter of what we average. But they are not the 85 percent total level. I think the average is near 85 percent or it was in 2003. In terms of the mission-capable rates of those aircraft, in the last year with the use, those that we have used in the operating area have had a higher mission-capable rate, those who have stayed behind have had a lower mission-capable rate.

Senator INHOFE. I understand that. I understand the rotation and how that works. But nonetheless, the mission-capable rate is actually improving and it has over the last 3 years.

Secretary ROCHE. It has, because of spare parts and depot work. But it has not made the 85 percent goal.

Senator INHOFE. I think a lot of that is because the depots have done a very good job; do you not?

Secretary ROCHE. Absolutely.

Senator INHOFE. Thank you very much.

Secretary ROCHE. Spare parts. Congress gave us a lot of spare parts.

Chairman WARNER. Senator Inhofe, your question about the alternate use of these aircraft for airlift other than fuel, I think it is important that we put into this record today exactly what—I understand 6 pallets could be placed in there and up to 200 individuals. Can you give us some rough parameters?

Secretary ROCHE. Yes, sir, and I am going to ask my colleagues to correct me because I am sure I am going to be wrong.

Chairman WARNER. Please do not be wrong. Let us start off right.

Secretary ROCHE. That is right. Six pallets on a KC–135.

Chairman WARNER. If you want you can just do it for the record.

Secretary ROCHE. We will.

Chairman WARNER. But it is roughly what?

Secretary ROCHE. It is 6 on a KC–135, and on a 767 it is 19, but on a KC–10 it is 19 to 27. So this class of aircraft, although smaller than a KC–10, gives you much more lift capability in carrying 19 pallets as compared to 6.

Chairman WARNER. I think the record should have a reference to that alternative use. If there were an emergency and we had to move a significant amount of equipment quickly, they could, assuming there was not a demand elsewhere.

Now we go to our distinguished colleague here, Mr. Nelson.

Senator BEN NELSON. Thank you, Mr. Chairman, gentlemen. The question for me is not, Mr. Chairman, whether or not we need these tankers. I think we do. The question for me is the question that the Senator from Arizona as my chairman of the Commerce Committee probed yesterday in the Commerce Committee, the question of leasing versus the purchase.

So my question would be to you, Mr. Secretary. Yesterday you sat at a table with three other folks in the Commerce Committee: someone from GAO, someone from CBO, and someone from the IDA. They all said that they thought it was a better deal to purchase than lease. Could you respond to that, please?

Secretary ROCHE. Briefly, Senator, the same point I made yesterday, is that it depends on the model that is used. The net present value calculation has two streams of outflows of money. One is lease and one is acquiring. How you acquire, what models, when you can do it, how you can do it, becomes very important, and the underlying assumptions there are quite important.

We used the current situation where there was no additional money and we had to go in the normal acquisition manner, and on that basis we saw the comparison to be very close, favoring purchase by $1.5 million per airplane. If you could take some extraordinary measures for acquisition which we could only hypothesize, but not really say would be approved by Congress, then you could in fact favor purchase by as much as $1.9 billion. But it would require such things as a lot of up-front money we do not see, changes to how, for the rules of when you can amortize non-recurring and not amortize, colors of money, other things.

If those all could be put in place, then the purchase is favored. But under normal acquisition process, you have to spend all the money up front without getting anything and then you start to buy airplanes.

Senator BILL NELSON. There was a question, Mr. Secretary, yesterday about a part that was not competed, a part that between—okay, it was special purpose entity. Would you respond to that, why that was not competed?

Secretary ROCHE. Special purpose entity was a mechanism to be able to effect a lease and it is a nonprofit entity, so the sense of someone competing to be that does not feel compelling. We did look around and agreed with the manufacturer what would be a sensible third party, detached third party. I can get you more details as to how that party was chosen and I would be glad to provide that for the record.

[The information referred to follows:]

The requirements of the Competition in Contracting Act were met with the Justification and Approval (J&A) for sole source of the aircraft lease program. The J&A for the Multi-Year Aircraft Lease Pilot Program was signed by the Assistant Secretary of the Air Force (Acquisition) on 4 November 2002.

The SPE is not a "contractor" under the Competition in Contracting Act. Rather, the SPE is a legal entity that holds title to the tanker aircraft and accounts for lease-related funds. The legal authority and roles of the SPE are expressly set out

in the trust agreement. The SPE benefits the Government by shielding aircraft title from potential claims by third parties and by assuring lenders of prompt payments from rents received, thereby lowering the Government's overall cost of borrowing. The SPE does not make a profit.

Senator BILL NELSON. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much.

Senator Roberts.

Senator ROBERTS. Yes, sir, Mr. Chairman. Thank you.

I am intrigued by the suggestion by my good friend from Oklahoma in regards to the 68 tankers that you plan on retiring and his suggestion that we find some other use for the tankers, which I endorse. I thought perhaps they could be used for CODELs and then the members could work on the corrosion problems as they fly from place to place around the world. Just a thought.

Mr. Secretary, there is more than one way to skin a cat than sticking his head in a boot jack and pulling on his tail. That is just about like what I think we have done in terms of handling this situation. Good intentions that I do not challenge or impugn aside, that is what I think is happening now.

Senator Levin posed a very interesting and good question about other requirements and why we should go into a leasing plan on tankers as opposed to other requirements. I am fully familiar with this, being chairman of the Intelligence Committee, and that we have quite a bit of infrastructure that we pay for on a regular basis and then we have to beg, borrow, or steal from supplementals in regards to get the analytical product that we need. That is not right, and that is really basic in terms of our national security.

So I agree with Senator Levin, with the exception that Mr. Kaplan pointed out this is not a normal course of events. We are talking about access denial. We are talking about post-September 11. We are talking about 2 years ago nobody would have ever thought we would be in Afghanistan or Iraq or possibly North Korea or possibly Iran, or the Southern Hemisphere, where we have 31 nations several of which are in trouble, or Africa. We are talking about access denial of our troops to get to a place where our national security is involved and I think that that is the difference.

Let me ask you just a couple of questions if I might. Over 90 percent of your aerial refueling fleet is over 40 years old. What concerns do you have regarding possible fleet-wide groundings and access denial that I am talking about, a class problem, if you will?

Secretary ROCHE. That has been the concern, sir. As planes get older, we are not sure how they are going to break. General Mike Ryan, the prior chief, made a point that we are learning that airplanes can break in ways we did not understand in the past, because we are flying them as we did before, with the same amount of weight, we are using them a lot more. We have actually had an increase in the use of these aircraft, about 25 percent in the case of the 135s, actually over 70 percent in the case of the KC–10s because they are newer, and that the increased use will put greater demands on them and greater maintenance demands and a class problem could emerge.

It is a hedge against the class problem, given our projection needs, that leads me to support the notion of acquiring 100 of these planes in a fast fashion.

Senator ROBERTS. Some critics of the proposal claim that the corrosion problems associated with the KC–135 are no worse than the corrosion problems associated with other aircraft and we can simply fix them and go on. What is your response to this claim?

Secretary ROCHE. In certain aircraft like the F–15Cs that we have, we are finding that those that are near salt water are corroding a lot faster. I think we are going to have to retire aircraft that have been at Kadena Air Base for years. We have placed restrictions in g-force and restrictions in speed on these other aircraft because of corrosion problems. So we see the age and corrosion issue affect the other aircraft as well and causing us to put limitations on the plane.

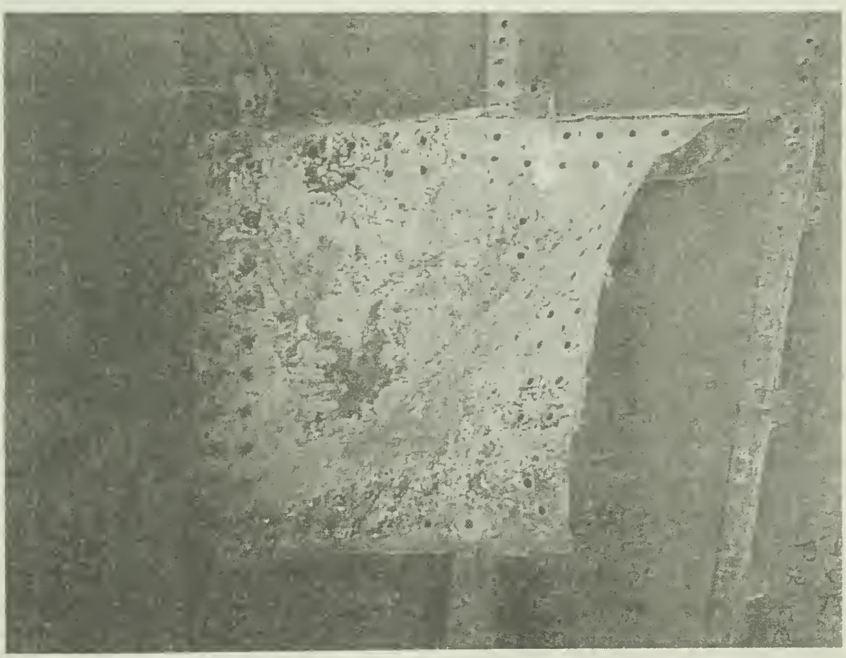
Senator ROBERTS. I have been to McConnell Air Force Base. I have not been to Tinker. I should go to Tinker. I will go to Tinker with you, Jim.

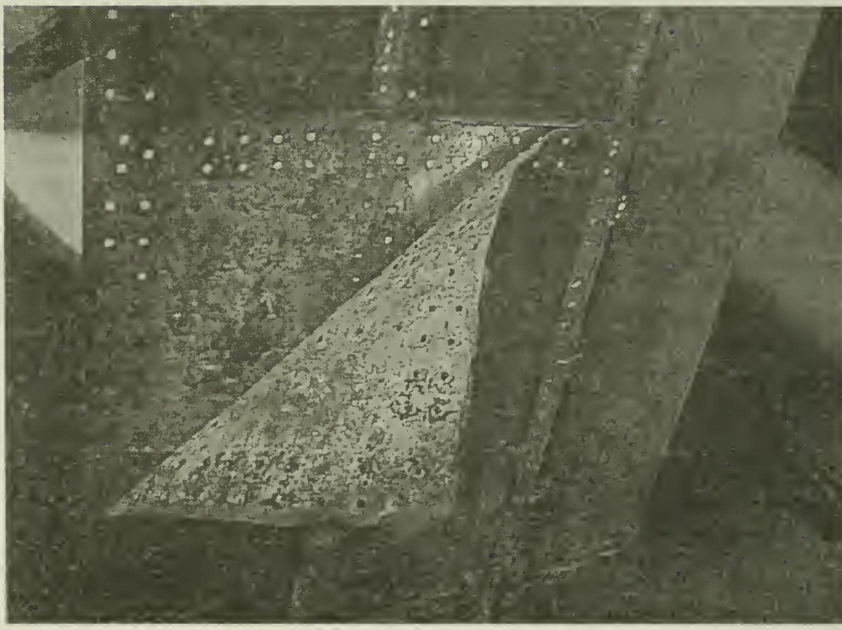
Senator INHOFE. Good.

Senator ROBERTS. I think both depots are doing an outstanding job, and they now have more spare parts and so those numbers are increasing. But I viewed first-hand the corrosion problems now plaguing the tankers as pertaining to the question of Senator Akaka.

Let me show you what I mean. This [indicating] is the belly skin of the KC–135E.

[The information referred to follows:]





This is a major problem. If you look on the other side you do not think that there is a problem, but here is a big-time problem. This could not be fixed with normal maintenance. It takes a special plan. It takes a special effort to fix this problem. Basically, it takes 100 man-hours to fix this problem, $150 an hour, and that is about $15,000 and weeks and months that we have to deal with this.

This is a much more common experience than it used to be. This is the kind of corrosion problem that could lead to a class problem with all of the tanker aircraft.

I do not want the warfighter fighting in this kind of plane. I have seen this kind of corrosion at McConnell AFB. More especially, I do not want to get on the plane. I would simply close by saying that Mr. Kaplan said this is not a normal course of events. We do not want this to happen. I was trying to get a screwdriver so I could punch through this. We do not have a screwdriver with us. I am certainly not going to use my fist.

I think that we are slow-dancing with this issue, and I thank all the witnesses.

Chairman WARNER. Does that conclude your questioning?

Senator ROBERTS. I think it is a pretty good question to conclude on, yes, sir. Thank you.

Chairman WARNER. Senator Chambliss.

Senator CHAMBLISS. Mr. Chairman, I apologize for having to run back and forth to another hearing. I know that some of my concerns have been raised already because I have heard parts of the questions.

Secretary Roche, I am wondering why we have decided to proceed with the lease as opposed to the multi-year buy that we are

doing so successfully on the C–130 and the C–17. If that has been asked, I apologize.

Secretary ROCHE. No, sir, it has not. The multi-year buy in both of those cases had an aircraft that was produced, looked at, tested, so that the concerns about it were reduced before Congress said, all right, now it can be multi-year. We know of no example where something starts out as multi-year without having a demonstration aircraft, and that would cost more time.

The issue we are trying to raise is to hedge against time and to get aircraft in the fleet faster. If we were to try the normal multi-year, we would have to go through development, field a plane, demonstrate to Congress that in fact it is a viable plane to go into production with very little uncertainty, and then build that out in a multi-year fashion.

Senator CHAMBLISS. Well, it looks like that is a major problem in and of itself that we ought to try to overcome. I mean, if the airplane is there and we are going to lease it we ought to be able to multi-year buy that weapon system.

Secretary ROCHE. Under the lease that we have, if we had the funds in budget authority we could buy out the lease at almost any time.

Senator CHAMBLISS. With respect to depot maintenance, I am concerned about the fact it appears that we are just, as a part of the price of the lease, contracting out in effect the depot maintenance up front. I am concerned about that being in the best interest of the taxpayer and the best interest of the warfighter. We have had these philosophical arguments and you and I have had a number of discussions about that. You know my concerns and you know my interest.

I do have a serious concern about the fact that we are just, without any competition whatsoever, all of a sudden saying we are just going to lease these? Are we going to let the contractor do the maintenance, because that is in the best interest of the weapon system?

So if this does come about—and I will be honest; I do not know where I am yet—but I would hope that, and I have heard you mention briefly, that there is the potential for a partnering arrangement not unlike the C–17. Of course, this does not affect my depot. But, the overall system I think demands that we continue to provide the availability or the ability within the depot system to do work on new weapon systems, and this could be another one of those unintentional or unintended consequences. It could be a situation where we have an unintended consequence of removing from the depot the availability or the ability to do depot maintenance on a newer weapon system and we continue to be relegated to working on old systems.

So if this does come about, I know everybody on the committee is going to want to make sure that we do the right thing with respect to the depot maintenance.

Secretary ROCHE. Yes, sir. We have talked in the case of C–17s of the partnership to have the depot involved. What we would like to look at in this case is to have the depot partner earlier during the warranty period with the manufacturer, so that the depot de-

velops expertise during that same period. If that is possible, we would like to head in that direction.

Chairman WARNER. Senator Reed.

Senator REED. Thank you, Mr. Chairman, and thank you, gentlemen. This is a very important issue. It is a complicated issue. My knowledge of this complicated financial transaction is only exceeded by my knowledge of materials engineering. So it is an interesting topic.

Let me just say, though, that it seems to me that in a commercial transaction you would get a fairness opinion from an outside objective party. All of the opinions that we are hearing from CBO and GAO, the "outside parties," seem to be negative with respect to this proposal. Is there any non-involved party that has rendered an opinion or an evaluation of this?

Secretary ROCHE. Seen from the point of view of the Air Force, Senator, for the last year and a half we have had everybody reviewing this. Certainly a number of staff within the Office of Secretary of Defense, culminating in the creation of a leasing panel to take a look at it separate from the Air Force, and then independently the OMB. So we believe our fairness opinion which would occur in a commercial sense has been done, both by the Office of the Secretary of Defense for Secretary Rumsfeld and by the OMB.

Senator REED. Then there is the argument about how disinterested these parties are and how insulated they are from the pressures which we have noted, both political pressures and other pressures. Frankly, it does not strike me as particularly independent. The Air Force has been an advocate for replacing their fleet and doing it in a creative way. The company certainly is an advocate for selling their aircraft.

Secretary ROCHE. Yes.

Senator REED. I think within the Department of Defense there are some indications that at least initial reviews by PA&E were similar to CBO and others which were quite negative. So I guess it would help me tremendously if there was something out there that was truly independent and a true fairness opinion about a transaction which in a normal business proceeding you would—this complicated lease arrangement, financing, would be accompanied by a bevy of fairness opinions from hired guns who presumptively do not have anything in the mix.

Secretary ROCHE. May I ask Secretary Wynne to comment on that, because I believe they have come at us from all sides, where we have had to go back and improve things because it would not have met their criteria for a fairness opinion.

Secretary WYNNE. I will admit in advance, Senator Reed, that the OSD can hardly be described as a disinterested party. I think we have as much interest in protecting and preserving our Armed Forces and doing it in the most timely manner than anyone else.

That did not deter us, however, from, as Secretary Roche indicated, questioning them fairly determinedly. In fact, we considered the PA&E memorandum. They often do financial red teams on arrangements that we want to do. I myself, for example, asked for the most favored customer clause, which I am not going to take credit for its ultimate evolution. I think Secretary Sambur did a

marvelous job of pushing that home. But it was a very difficult thing to determine best value in a sole source acquisition sense.

I think, however, we arrived at a conclusion that was beneficial, and on a net present value basis we see it to be fair and balanced. $150 million without consideration of the operations and support costs that we believe is going to be there is tantamount to being on balance. So I would tell you that the leasing panel and Dov Zakheim as well did a pretty thorough review and just on balance we felt that getting these airplanes sooner, sooner than later, and not disrupting the ongoing programs, to achieve our goal of program stability, all merited approval.

Senator REED. Thank you, Mr. Secretary. I appreciate certainly your efforts and the energy you put into this. But still, an observation is that on one side you have agencies that seem to be removed from the transaction; on your side you have everyone who is involved in the transaction, and I think it would favor your position if there was someone more objective that was rendering an opinion that supported your position. That is just an observation.

Let me ask, Secretary Roche. It seems to me that critical to all these different evaluations are the assumptions. Without going into the detailed analysis, what are the key assumptions that you have made that makes this deal work for the Air Force?

Secretary ROCHE. The key assumption, Senator, that we used was that the procurement side, the purchase side, would be according to the normal set of rules, regulations put in place, the fact that you spend the money for a development program, you then go through a lot of tests of that program, and only after all that is done you go into limited production, and then other tests, and then you go into production.

It is a time phasing of it, and the delay of the planes is the issue.

Senator REED. It seems to me, Mr. Secretary, that is an assumption that one could question, since you have an aircraft that is sitting down, already designed. Boeing did a lot of that to build the 767, and that you have to make some modifications. They are not trivial. But if that is the assumption, again I would question the assumption.

Secretary ROCHE. We went by the rules, sir. I grant you that a development program would be a lot shorter because it is an existing aircraft. But the assumption in following the rules is that you have to do it that way.

Senator REED. You seem to be following the rules in one aspect and asking us to bend the rules considerably to do this lease job. We are not going to Boeing and saying, build us an aircraft from scratch and then we will lease it. We are saying, you have this aircraft—in fact, they are telling us: We have these aircraft; we can modify them and give them to you.

Again, this goes to the analysis.

Secretary ROCHE. The second point was the assumption of the availability of money.

Senator REED. Yes.

Secretary ROCHE. We did not assume that there would be $5 to $11 billion additional made available in this period.

Senator REED. Let me ask a final question, which I am sure has been covered before. That is, you have done the life cycle cost com-

parisons and your conclusion I presume is that the life cycle cost, the maintenance and the operations and the timing of the aircraft going into the fleet, favor the lease and disfavor the purchase. Is that a fair insight?

Secretary ROCHE. It is a fair insight, especially if you note that having these planes in earlier has operational savings, and we would not replace one for one. We do not believe when all is said and done with new aircraft that we are going to have a one for one replacement of 544 airplanes for the needs of the future. We think it will be a much lower number.

Having 100 and observing what they can do will give us a very good idea of the total for the long run.

Senator REED. Again, thank you very much, gentlemen. This is I find a very important issue, a very complicated issue, and it has been useful from my perspective to hear your views.

Thank you, Mr. Chairman.

Chairman WARNER. Thank you, Senator Reed.

Colleagues, we have a second panel that deserves the thoroughness with which we have had our exchange of views and questions with the first. Senator Sessions, you have not had the opportunity for your first round. It is the desire of the chair to have you proceed with your first round and then we will—I have but one question and I hope other members remaining can limit their second round of questions so that we can get to the second panel and proceed.

Senator Sessions.

Senator SESSIONS. Thank you, Mr. Chairman.

Mr. Wynne, you used the phrase I believe earlier that if we do not use the lease arrangement it will take much longer to get 100 aircraft. If we utilize the expected expenditure levels for leasing and applied that to a purchasing system, do you know how much longer it would take?

Secretary WYNNE. Sir, the terms of the lease are so favorable that it would probably be 7 or 8 years difference between receipt of aircraft, even if we were to purchase the airplane outright, as some have indicated, and pay up front the appropriate amount. But frankly, the cash flow savings that you get from leasing do not catch up to payments for several years.

That having been said, I think the minimum everybody has anticipated in delay is 5 years. You would get 12 airplanes during the Future Years Defense Plan now by purchasing and you would get 60 airplanes by leasing.

Senator SESSIONS. In 5 years?

Secretary WYNNE. In the Future Years Defense Plan, yes, sir.

Senator SESSIONS. Mr. Chairman, I have looked at the KC–135E, which is the oldest upgrade, which is about $25 million for that. I guess the question we have in this fleet is just how big a crisis we are facing, just how quickly it needs to be brought on line.

I am not happy with creating a lease system that results in a bow wave down the line, that we now have to alter our budget to figure out whether we are going to have the money to bring this on. It seems like to me that in general I would favor the purchase agreement, the purchase system. So I have some doubts about that.

Now, we have in the Senate version of this bill a requirement for an AOA. I do not know what will come out of this conference. We

are talking about changing that, I suppose. But what would happen if we waited a year and had an AOA? This may not be technically a purchase, but it is certainly a lease-purchase and it amounts to the same thing. Why should we not have an AOA, Secretary Roche?

Secretary ROCHE. Senator, our sense is that the due diligence we did in forming the lease package covered what would normally be covered in an AOA, an informal AOA. Delaying a year would just delay getting a hedge against any problems of these aging aircraft.

It would also continue to have us invest in some very old aircraft. The ones we seek to replace are the E models. A number of the Rs will in fact be in service until they are 70-some years old. So there will still be plenty of 135s flying around. It is trying to get the E models off the books and substitute aircraft that have more capability and that are far more reliable.

Secretary WYNNE. Senator Sessions, I would tell you, sir, that an AOA often goes to product, in other words would the product be appropriate. I think the discussion and the debate has been about process, i.e., how do you acquire that product. Going back and looking at an AOA of how do you deliver air tankerage to note only our forces, but also coalition forces, probably would determine product content.

We do not see that the Es, which are facing fleet standdowns and some of whom I believe, Secretary Roche, have gone over all of the reliability statistics that Boeing originally did, because they did not believe we would be flying them this long when they were originally produced and qualified—it would seem to me that, as I mentioned in my testimony and I think as we submitted in the report, the informal AOA to get this product consisted of new aircraft, consisted of getting a commercial derivative aircraft, and consisted of re-engining the KC–135s.

The KC–135 re-engining on the Es was determined to be insufficient to extend their life because of the corrosion aspect and the price, frankly, even in the strut situation, of impinging upon our operations and support (O&S) costs.

The idea of whether you go get a commercial derivative was in fact the Air Force's plan. The cost risk there is whether or not Boeing could sustain this commercially available derivative aircraft. If they do not sustain this commercially derivative aircraft, then we would be paying for essentially the creation of a brand new airplane, and that cost risk would be between $150 and perhaps $200 million.

So all of those things I think drove us to the informal analysis of alternatives to not only do a commercially available 767, but to get it in the shortest possible time.

Senator SESSIONS. Just to get the numbers straight, Mr. Kaplan, your analysis at OMB was that we would come out, the lease arrangement would cost $150 million to $1.5 billion more? Was that your analysis?

Mr. KAPLAN. Actually, I think the analysis reflects, Senator, a range of $150 million to $1.9 billion in net present value.

Senator SESSIONS. That is the net present value procedure. CBO used the—what is their standard? They came out with $5 billion.

Mr. KAPLAN. Actually, Senator, if I may, I believe what you are referring to is CBO, as we did and as the Air Force did, calculated

the difference in then-year dollars and then also, as is required by OMB Circular A–94, presented a net present value calculation. Under net present value, I believe that CBO's number is $1.3 billion.

Senator SESSIONS. What is the best one in this circumstance? I know you do one and they can do another one. When applied to these circumstances, what is your opinion of the best approach and the best figure?

Mr. KAPLAN. Senator, because the A–94 analysis requires the comparison of an actual proposed deal, which is the lease deal, to a hypothetical purchase, it just depends on the assumptions. I think the range is right. I think $150 million is on the low end. I think OMB would include some of the other assumptions, not necessarily the same ones CBO did, but some assumptions that would make the net present value higher, somewhere in the $1 billion and up range.

Senator SESSIONS. That would run something like 15 percent or so more at least, would it not, and a lot more than that if you took the CBO numbers? Your range would be about 15 percent more expensive leasing?

Mr. KAPLAN. In net present value terms, I think that is right, Senator. I have not done the math. But that is why we did present the range, the Air Force did present the range in its report to Congress, so that Congress would have that information and could make its judgment accordingly.

Senator SESSIONS. Thank you, Mr. Chairman.

Chairman WARNER. Thank you very much.

I will proceed to ask my one question and then recognize others. I have here the submission by the GAO today, in which there is a chart showing the bow wave in the out years as a consequence should this program be approved by Congress. Having some familiarity with the military departments and these types of charts, this thing will suck the life's blood right out of the Department of the Air Force, the magnitude of this bow wave.

It is also going to have repercussions on the annual, I call it, scramble between the three military departments to get their fair share of the budget each year.

Now, I have to say with all due respect, gentlemen, when I asked the question of whether or not anyone had looked at a 25 buy I recognized, Secretary Wynne, the predicament with the manufacturer and the possibility his line goes down. I am going to pursue that a little bit here and take the views of my committee to possibly see whether or not we can quickly look at some bifurcated situation where we take part of this proposal, but then go back to traditional ways of budgeting and planning for the three military departments.

So I guess I put that in the way of a statement. But I would have to say, if you want to comment, do you think it is a reasonably accurate bow wave?

Secretary ROCHE. Yes, sir, I think that is. The alternative would be a bow wave that is in the front end if we were to try and purchase on the same schedule. We were required to take into account all of the lease payments and possible purchases if in fact we had an authorization and appropriation into a modest Air Force budget over time.

What is not reflected there, Mr. Chairman, is that programs like the C–17 will have ended just before that point. We showed that it could be accounted for in our budget, but if in fact there was more money, more budget authority available, we could buy out the lease and buy down that hill.

Chairman WARNER. I have taken my time. Senator Levin, let us proceed as quick as we can to conclude with this panel.

Senator LEVIN. Mr. Kaplan, you in answer to Senator Sessions' question gave us a very critical piece of information. I want to make sure I understood it correctly. You said that basically you believe that with the correct assumptions that the difference in net present value between leasing and regular purchasing would be somewhat over $1 billion; is that correct?

Mr. KAPLAN. I think it would be in the neighborhood, that is right, Senator.

Senator LEVIN. Did you say slightly over $1 billion?

Mr. KAPLAN. I think I did say $1 billion or slightly over. I would have to look at the record.

Senator LEVIN. Is that OMB's best assessment?

Mr. KAPLAN. That is my assessment based on what I have learned. I think that represents a consensus within OMB. There are different views within OMB.

Senator LEVIN. Are you speaking on behalf of OMB here today?

Mr. KAPLAN. I am, Senator.

Senator LEVIN. Okay. So we are going to have to——

Chairman WARNER. Let me articulate it for the record. Are you speaking with your professional personal opinion or on behalf of the Director and the OMB?

Mr. KAPLAN. I am speaking on behalf of the Director and OMB, Mr. Chairman.

Senator LEVIN. So that the Air Force presented a $150 million difference, but it is OMB's best judgment that it is $1 billion or slightly more using an apples and apples comparison, the net present value approach, which is required by I believe executive order or by OMB regulation; is that correct?

Mr. KAPLAN. Actually, Senator, I believe the Air Force in its report to Congress reflected exactly the range that I have discussed here today.

Senator LEVIN. Yes, they expressed a range, the higher part in a footnote; is that not correct?

Mr. KAPLAN. That is correct, Senator.

Senator LEVIN. As a matter of fact, they did it because OMB really pressed them to do it; is that not correct?

Mr. KAPLAN. I believe there were ongoing negotiations. I was not there, but I think that was——

Secretary ROCHE. Correct.

Senator LEVIN. Secretary Roche is saying "Correct."

Mr. KAPLAN. That would be consistent with my testimony here today, Senator.

Senator LEVIN. You should not be reluctant, if you had to pressure the Air Force into putting it in there, to say so. The Air Force is acknowledging that they put it in there because OMB urged them to put it in there.

But my point is you have tried to give us here a range, it is somewhere between $150 million and $1.9 billion, but within that range it is OMB's judgment that it is $1 billion or slightly more, the difference between leasing and buying, in apples and apples comparison; is that correct?

Mr. KAPLAN. It is OMB's view that, in a range of assumptions, that is probably the better range of assumptions, is to take the higher end, roughly in the neighborhood of $1 billion or slightly more.

Senator LEVIN. That is your view? That is the best estimate you have? Within that range, that that is the best estimate?

Mr. KAPLAN. In comparing an actual lease to a theoretical purchase which is based on, Senator, a very difficult and complex range of assumptions——

Senator LEVIN. Of course.

Mr. KAPLAN.—that deal with the discount rate and other things which are subject to disagreement.

Senator LEVIN. Of course.

Mr. KAPLAN. That is why we presented a range, yes, Senator.

Senator LEVIN. Look, you might as well give us a direct answer. Within that range, it is your best estimate that it is slightly more than $1 billion?

Mr. KAPLAN. I believe I said that, yes, Senator.

Senator LEVIN. I am glad you believe that and I am glad the record will show that belief.

One last question. On this, Secretary Roche, I gather it is your intention to ultimately buy these planes; is that not true? That is your current intention?

Secretary ROCHE. Our current intention is to lease the planes and if they work out to consider coming back to Congress to get authorization and appropriation. But we would want to take a look at how these planes work out as tankers.

Senator LEVIN. You want to lease them before you know how they work out, and you are going to spend about how much on this?

Secretary ROCHE. That is because by virtue of a lease we can always return them.

Senator LEVIN. How much are you committed to pay under that lease before you know whether they work out?

Secretary ROCHE. Senator, that would depend on how many were available, how we used them in conflict.

Senator LEVIN. Is it not about 90 percent of the value?

Secretary ROCHE. That is if you go through to the full lease.

Senator LEVIN. That is what you are committed to lease, right?

Secretary ROCHE. I would think we would come in much earlier than that to discuss authorizing and appropriating to purchase, because you can also purchase out of the lease.

Senator LEVIN. That is not my question. You said before you knew whether they work. You are committing to pay about 90 percent of the value under this lease, are you not, before you know whether they work?

Secretary ROCHE. No, sir, we will know a lot earlier. We are committed to paying 90 percent of the lease during the normal lease

terms and then we have a small residual to pay if in fact we chose to purchase them.

Secretary WYNNE. If I could help, I do not think we are actually committed to accepting those airplanes if they really do not work at all.

Senator LEVIN. Of course not.

That is the reason given for the lease, though. A minute ago we were told we were leasing it because, gee, we do not know if they work. Now you are saying, gee, if they do not work we are not committed to lease. I hope we are not committed to lease if they do not work.

Secretary ROCHE. I am sorry, Senator. I was using the word "work" in a different manner. If they worked out as well as we expected them to and there were no other alternatives. Obviously, they would have to meet spec.

Chairman WARNER. Work out, are you talking about mission performance or financial transactions?

Secretary ROCHE. All of those things, Mr. Chairman.

Chairman WARNER. What are you talking about?

Secretary ROCHE. All of those things. In other words, we cannot at this point say we definitely would purchase them at the end, although we have provisions, if we would, that we have a price——

Chairman WARNER. In this 2 years time you did not get a mock-up or borrow one and run a little test on it?

Secretary ROCHE. No, sir. The first one that is being developed is being developed for the Italian air force and it is under development now.

Senator LEVIN. The reason given for leasing that you just gave is that we really do not know if they are going to work, therefore we want to lease them.

Secretary ROCHE. No, sir, the reason for——

Senator LEVIN. The reason for leasing is you do not have the money now to buy them.

Secretary ROCHE. That is right, that is exactly right.

Senator LEVIN. Why do we not be just straightforward on that. You do not have the money now to buy them or else you would. Why do we not just be straightforward.

Secretary ROCHE. I am sorry, sir. I think we said that. I said that earlier. It was whether we should buy them at the residual.

Senator LEVIN. Okay. I think it is important, though, that you be straight on that. If you had the money now you would buy them, you would not lease them.

Secretary ROCHE. If we had the money now and we could buy them, we would.

Senator LEVIN. Okay, under the usual procurement approach?

Secretary ROCHE. We would ask that the procurement approach be changed so we get them at the same schedule, because getting them earlier is——

Senator LEVIN. Of course. But under the usual rules of procurement you would do it with a multi-year; is that correct?

Secretary ROCHE. If there were all of the things necessary to get the same number of planes in the same amount of time and the money were available in the beginning, yes, we would purchase, because it is less complex.

Senator LEVIN. Less complex? It also is the way we ordinarily buy things, for good reasons.

Final question: The CBO letter said the following—Mr. Kaplan, let me address this to you. It says that: "The proposed contract between Boeing and the Air Force, as well as the financing arrangement, clearly indicates that the statutory trust exists solely to borrow money on behalf of the Federal Government to allow the Air Force to acquire an asset that has been built to its unique specifications." Do you agree with that?

Mr. KAPLAN. No, Senator.

Senator LEVIN. Okay. You do not agree that the contract between Boeing and the Air Force, as well as the financing arrangement, indicates that that trust exists to borrow money on behalf of the Federal Government, to allow the Air Force to acquire an asset that has been built to its specifications? You disagree with that?

Mr. KAPLAN. I agree with the first portion of it and then there were other elements of it that I disagree with. First of all, the Air Force does not acquire the asset. The special purpose entity acquires the asset. The purpose as I understand it of the special purpose entity was to achieve a lower borrowing rate from the bondholders, which would reduce the cost of the lease to the taxpayers.

Senator LEVIN. Is this special purpose entity out there going to be flying planes and carrying out missions, or is it the Air Force?

Mr. KAPLAN. It is the Air Force, Senator.

Senator LEVIN. This entity is not there to carry out Air Force missions, is it? It is there to help acquire property that we cannot pay for now. Why are we not straight on that issue?

If you had the money now, we would buy it. Let us just be honest about it.

Mr. KAPLAN. Senator, I do not believe I have suggested otherwise.

Senator LEVIN. So the purpose of that entity is because we do not have the money now. We are going to create an entity to borrow money for the government and we are going to pay more for it. Your estimate is $1 billion in an apples and apples basis.

The argument is not—okay, maybe we ought to do that. I can accept that argument. If we do not have the money now, let us do it this way because it is such a desperate need to do it, instead of raising the budget, borrowing money now, pay, borrow money later and pay more. I may not agree with the argument, but at least it is an honest argument.

But to suggest that somehow or other we are not acquiring this property, it is some special purpose entity out there that is acquiring it, it seems to me is engaging in a fantasy. I do not want to engage in those kind of fantasies.

Mr. KAPLAN. I do not either, Senator. The Air Force does not acquire these planes at the end of the lease. Congress will have to——

Senator LEVIN. It is intended that the Air Force will acquire these planes. That is the whole purpose of this, is that we acquire planes without money up front. That is the purpose of this thing.

Secretary WYNNE. But it does presume, sir, on Congress.

Senator LEVIN. That is the intent, the purpose, that we acquire these planes, because we are doing it by lease now because we do not have the money up front. Why not be straight about it?

Secretary WYNNE. As the Inspector General said, he did say that the Air Force should proceed apace to give the business case to Congress for purchase. Otherwise we would be presuming on Congress.

Senator LEVIN. Last question——

Chairman WARNER. Oh, no, you have—another member just came and we are getting——

Senator LEVIN. Can I have 30 more seconds? Okay. I will hold it off and do it later. No, no, that is okay.

Chairman WARNER. Take 30 seconds.

Senator LEVIN. No, that is okay. If I have overstayed, I will come back again.

Senator MCCAIN. I just have one.

Chairman WARNER. Okay, you have one. You have 30 seconds. We have to get this organized and run along on this railroad here.

All right, Senator Allard, this is your first round.

Senator ALLARD. Mr. Chairman, thank you. I apologize, I had to step out just a moment.

We heard in the Budget Committee yesterday that the lease is inconsistent with Federal budgetary principles. I have just a couple questions in that regard for Mr. Kaplan. Would this proposal bypass the budget process?

Mr. KAPLAN. No, Senator. The money for the proposal, the money for the lease payments in the FYDP, is budgeted and is accounted for.

Senator ALLARD. Does it concern you that this future liability will not be scored and will not be counted in terms of budgetary resources?

Mr. KAPLAN. It is scored, Senator. It is scored as an operating lease.

Senator ALLARD. So each year as an operating lease then it will be brought into the budget; is that correct?

Mr. KAPLAN. I believe that is correct, Senator.

Senator ALLARD. Okay. Then you think it will be accounted for in the budget process?

Mr. KAPLAN. Yes, Senator, ultimately all of the lease payments will be accounted for in the budget process.

Senator ALLARD. Okay. Now it is not a lease-purchase?

Mr. KAPLAN. No, Senator.

Senator ALLARD. It is not a lease?

Mr. KAPLAN. It is an operating lease, Senator.

Senator ALLARD. But it does not meet all the requirements which ordinarily you have for a lease. There are six parameters. This only meets two of those parameters. The other four parameters, from what I understand from the testimony yesterday, are not met.

Mr. KAPLAN. That is not my testimony, Senator. My testimony is, as I stated at the outset, that this is a close call. The proposal on a number of these criteria is right at the margin. We recognize that, OMB recognizes that, and in light of the congressional interest as expressed in legislation and in light of the compelling need that the Air Force and the Department of Defense have presented

we have concluded that it does satisfy the criteria for an operating lease.

Senator ALLARD. Okay. Here are some of the things that have been brought up by the Budget Committee and I would like to have you respond to me if you would, please: that CBO reached a determination that the asset was not a general purpose asset, which is one of the requirements. Would you respond to that? They say you have a tanker plane and the only use you can use a tanker plane is to fly for fuel and you cannot put it out on the general market and use it. These are requirements for a lease-purchase.

Mr. KAPLAN. Yes, Senator, and Boeing developed the 767 global tanker transport aircraft commercially. It was not responding to a request from the administration or from the Federal Government. It markets it commercially. It marketed it on its Web site before Congress authorized it, I believe. It has sold it to other governments. It has sold it to the Italian government. It, I believe, is in final stages of negotiation with the Japanese government. In its freighter configuration it expects to have a commercial market, both within governments and outside of governments.

Senator ALLARD. Are they sold to these other countries as refueling planes, or what is their purpose?

Mr. KAPLAN. Yes.

Senator ALLARD. What do they do? Then we have to pay to take off the retrofit that we did to carry fuel in order to make them marketable? Is that what has to happen?

Mr. KAPLAN. Senator, I believe Italy purchased these in their tanker configuration. I believe that is Japan's intention as well.

Senator ALLARD. Do you believe the Air Force included the construction loan financing in its assessment of the fair market value of the aircraft? Is this treatment unusual, and how do the interest rates affect the fair market value?

Mr. KAPLAN. It is certainly the case that the Air Force included the cost of construction financing in their calculation of the lease payments and the comparison to fair market value, and they came up with a number of $138.4 million, I believe.

The test is whether the sum of the lease payments exceeds 90 percent of the fair market value. This is one of the difficulties of A–11. We have to establish a fair market value. If you look at what the Italians paid for these planes in a similar configuration, it is $175 million. I do not think $175 million is the fair market value. I think something between $138 million and $175 million is a reasonable place to end up, and that gets you below 90 percent.

Senator ALLARD. I want to move on to this trust. I know there was some discussion earlier. Here is the way that the CBO report to Congress describes this trust, and I want to know if you agree with what they say or not: "The borrowing activities of the special purpose entity"—that is the trust—"will be directed by a financing committee composed of the Air Force, Boeing, and the lease administrator," just those three entities apparently. "The Air Force has asked Boeing to serve as the lease administrator. Under the operating guidelines for the financing committee, the Air Force must approve all of the terms and conditions of the financing plan and must review and approve all financing documents. CBO concludes

that the action of that committee will be explicitly controlled by the Air Force."

Would you agree with that?

Mr. KAPLAN. Senator, I had actually thought that the lease administrator was not Boeing, but that the trustee was a member of that financing committee. I will take it for the record and get with my staff.

[The information referred to follows:]

As with a number of the issues that arose with this very complicated leasing transaction, reasonable minds can come to different conclusions. In this case, we do not agree with CBO that the Air Force will have explicit control over this entity. The SPE benefits the government by shielding the aircraft title from potential claims by Boeing's creditors. The SPE will also be able to borrow at a lower cost than Boeing, which translates into lower lease payments and savings for the taxpayers. However, the SPE is managed by the trustee (a Wilmington Trust employee), and its legal authority and roles are expressly set out in the trust agreement. It is not directed by the financing committee. Rather, the financing committee has the specific role of evaluating and executing the financing arrangements required to conclude the construction and lease of the aircraft to the government. The committee is comprised of the government, Boeing, and the lease administrator (a contractor employee). As laid out in the committee's operating guidelines, it must act with the concurrence of both the government and the contractor, and any financing plan must be reasonably acceptable to the contractor, although it must be approved by the government. The government retained approval authority for specific financing arrangements to ensure that it will receive the best possible financing arrangement and will not be forced into an unfavorable arrangement. Because the committee's authority is limited to financing arrangements, it will play no role in any sale of the aircraft.

Secretary ROCHE. May I help on that point of fact?

Senator ALLARD. Yes, Mr. Secretary.

Secretary ROCHE. The lease administrator is really the lease manager. The trustee is the administrator of the trust. Two different jobs.

Senator ALLARD. Okay, thanks for clarifying that.

I want to move on, and I have a question in regard to the various options. I understand the Air Force has conducted several analyses on other options to a lease proposal. Some of these options included re-engining our current fleet of the KC–135Es, leasing tanker services, or even purchasing commercial aircraft. I was particularly intrigued by the last option. I understand the Air Force could purchase these aircraft at reduced costs. DC–10, for example, is already in the Air Force's aerial refueling fleet and would not require new military construction. I have been told that there is from the commercial side some DC–10s that might be available.

Now, I understand that some of them have a lot of mileage on them and some of them may not be in good shape. But there might be some out there that are in good shape. Has there been any effort to try and see if that option is available?

Where I am driving at in this question is has the Air Force looked at some interim, bring on some of these planes, buy them or lease them, whatever, that would be much less expensive, to work you into a purchasing program for the 767 tanker that you are wanting to work in as a new plane?

Secretary ROCHE. Yes, sir. I would like to doublecheck to make sure we checked on used DC–10s. We certainly looked at used 767s of the 200ER configuration, which are the freighter versions, and

there were very few of those available and they had an enormous number of hours.

In the case of the DC–10, it has been out of production as a commercial plane since the late 1970s and out of production for the Air Force since the early 1980s. So the infrastructure supporting it around the world is not that great as compared to the 767.

Senator ALLARD. The thing I was bringing up, the 767, that means you have to have a whole new maintenance line out here. You may have to build new buildings for that. I do not know whether it would fit in any of your current buildings or not. But those are questions that come up. I know the commercial airlines look at that. In fact, a lot of them are trying to keep too much diversity in their flight, in their flying planes, because it creates problems with maintenance because you have to maintain so many crews that are experts in the various planes and what-not.

I assume that you have looked at some of that?

Secretary ROCHE. Yes, sir. At some point you transition, and our issue is that these planes, these tankers, have to be recapitalized at some point.

Staff has just provided me, sir: We did look at the DC–10s. There were very few that were of the configuration needed, freighter configuration DC–10s, and they had quite a number of hours on them, about 27 years old. Our experience with taking old 707s and refurbishing them for Joint Surveillance, Target Acquisition, and Reporting System (JSTARS) shows that they really do not start out as new planes; they start out as old planes.

Senator ALLARD. Thank you.

Chairman WARNER. Now we will proceed to Senator McCain.

Senator MCCAIN. Secretary Roche and Secretary Wynne, you are familiar with a June 20, 2003, memorandum for Under Secretary of Defense, Acquisition, Technology and Logistics, Under Secretary of Defense-Comptroller, "Subject: PA&E Analysis, KC–767A lease program"? Are you both familiar with that?

Secretary ROCHE. I am, sir.

Senator MCCAIN. Are you familiar with it, Secretary Wynne?

Secretary WYNNE. Yes, sir.

Senator MCCAIN. It basically says that "Our analysis indicates that the provisions of the lease cost more than the equivalent purchase. We find that leasing provides no inherent economic efficiencies relative to direct purchase of tankers, therefore more expensive in the long run." You are familiar with this, basically a memorandum objecting to the lease proposal from PA&E?

Secretary ROCHE. A question of fact, Senator: Does it begin by saying "The report to Congress," "The draft report to Congress"?

Senator MCCAIN. No, it says "This memorandum provides a summary of the A–94 and A–11 analysis developed by PA&E in response to taskings from the leasing review panel and subsequent leasing working groups. Analysis based on the latest version leasing contract provided my office on June 17, 2003."

Secretary ROCHE. Yes, sir. We both met with Mr. Krieg the next day.

Senator MCCAIN. Are you familiar with it?

Secretary ROCHE. Yes.

Senator McCAIN. Now, then that was on June 20. On June 23 did you have a meeting, Mr. Roche, with Thomas Owens of Boeing?

Secretary ROCHE. I do not know if I did or not, sir.

Senator McCAIN. Well, let me say, I have an email here that is written from Thomas Owens to Jim Albaugh, with a copy to Andrew Ellis: "Subject: Roche Meeting 23 June 2003." Do you remember it now?

Secretary ROCHE. No, sir.

Senator McCAIN. I tell you what. Maybe I can refresh your memory. "Tankers"—this is from the email that he sent. "Tankers." He started with: "We have a big problem," referring to the apparent PA&E question: "If you need tankers so bad, why is Air Force retiring KC–135s early?" Unquote. "He made reference to Chrissy-Poo several times. He is a McCain staffer. With regard dialogue reference best price effort, he seemed to be concerned more for Marv's benefit than he was himself. Marv having trouble with some over the issue of $138 million versus $131 million. Ask us to put pressure on Mike Wynne to convince PA&E to write new letter essentially undoing the first letter. He said he was not going to answer, would get in trouble no matter how he answered. Roche said he was going to talk to Wolfowitz tomorrow. Meanwhile, the report is stalled until Krieg or someone else figures out the letter is going to embarrass the SECDEF."

Do you have any recollection of that meeting?

Secretary ROCHE. No, sir. I do recollect meeting with Ken Krieg on a Monday. The letter from PA&E comes to the office on a Friday afternoon——

Senator McCAIN. I am asking about a meeting with Thomas Owens.

Secretary ROCHE. I do not recall it, Senator. I do not recall.

Senator McCAIN. You have no recollection whatsoever of telling Mr. Owens to put pressure on Mike Wynne to convince PA&E to write a new letter essentially undoing the first letter?

Secretary ROCHE. No, sir. That is Mr. Owens' characterization of what I may have said. I certainly said to someone at that time—it could have been Owens; I just do not remember if he was in the office—that we were working with Mike Wynne to deal with this. We also met with Ken Krieg that day, who made it clear that this was more like a red team letter.

But it was not pressure as much as it was, we have to get on with this.

Senator McCAIN. So this email is essentially false? You did not ask Boeing to put pressure on Mike Wynne to convince PA&E to write a new letter essentially undoing the first letter?

Secretary ROCHE. As they——

Senator McCAIN. Is that true or not, Mr. Secretary?

Secretary ROCHE. I do not think it is exactly that way, Senator.

Senator McCAIN. Did you or did you not——

Secretary ROCHE. I believe it was a matter that I——

Senator McCAIN. Secretary Roche, I would like you to respond to the question.

Secretary ROCHE.—did suggest that they talk to Secretary Wynne, yes. But the word "pressure"——

Senator McCAIN. Did you or did you not——

Secretary ROCHE. I did not ask them to put pressure.

Senator MCCAIN. Did you or did you not request Boeing to put pressure on Mike Wynne to convince PA&E to write a new letter essentially undoing the first letter? Did you or did you not?

Secretary ROCHE. I have no recollection of that, Senator. I know that we met with Ken Krieg and we decided not to write another letter, but to work out each of the issues.

Senator MCCAIN. I am asking about a meeting that you had with Boeing, employees of Boeing——

Secretary ROCHE. I cannot recollect saying that, Senator, I am sorry.

Senator MCCAIN. Secretary Wynne, was any pressure put on you?

Secretary WYNNE. No, sir, I reflect no pressure from Boeing.

Senator MCCAIN. I see, but you had plenty of meetings with them?

Secretary WYNNE. I had a relatively few meetings with Boeing, sir.

Senator MCCAIN. I have no more questions, Mr. Secretary.

Chairman WARNER. I suggest this be part of the record.

Senator MCCAIN. Without objection.

[The information referred to follows:]

Arnstad, Patty

From: Albaugh, Jim
Sent: Monday, June 23, 2003 3:00 PM
To: Arnstad, Patty
Subject: FW: Roche mtg 23 Jun 03

per Valerie's note

-----Original Message-----
From: Owens, Thomas A
Sent: Monday, June 23, 2003 11:22 AM
To: Albaugh, Jim
Cc: Ellis, Andrew K
Subject: Roche mtg 23 Jun 03

Jim--as best I can reconstruct:

Tankers - He started with "we have a big problem"--referring to the (apparently PA&E) question "if you need tankers so bad why is AF retiring KC-135Es early." He made reference to "Chrissie Poo" several times. He is a McCain staffer.

WRT dialogue ref "best price ever", he seemed to be concerned more for Marv's benefit than he was himself. He did make recommendations that we consider all factors e.g. non-recurring costs, improvements made to subsequent aircraft, NPV, rate of build, white tails etc. Bound the research by time--i.e. look back 10 years. Marv having trouble with some over issue of $138M vs $131M.

Ask us to put pressure on Mike Wynnne to convince PA&E to write new letter essentially undoing the first letter. He said he was not going to answer--would get in trouble no matter how he answered. (John Manning attempting to get mtg for you tomorrow). Roche said he was going to talk to Wolfowitz tomorrow.

Meanwhile the report is stalled until Craig or someone else figures out that the letter is going to embarrass the SECDEF.

BTW--Wynne, Roche, Sambur, Craig PA&E (sp?) and Semborski (the deputy) having tanker mtg at 3:30 this afternoon.

FCS - He quickly got off on the notion that it was a long way from the "C4 to the truck"--you know more than I -- sounds like an issue of open architecture where either legacy truck or new truck would be suitable.

EELV - A very messy issue to say the least.

FA-22 - He said he thought improvement was stalled out at five hours--Bob B confirms that but we are getting better. Part of problem is just keeping 4006 flying.

Mentioned briefly---

C-17 MYP good to go--I think he was referring to funding profile for this year.
Wedgetail--Australia (EW--BAE vs Elisera??)
Classified Program
Would like Sen Roberts support at next hearing.

TKR 006 0027

Senator INHOFE. Two very short questions. First of all, I think there might have been a misunderstanding, Secretary Roche, with my line of questioning concerning the shortage of tankers. I was not referring to the 68 potentially retired KC–135s as lift vehicles or something else. I was really referring to them as tankers.

Do you agree that we have a shortage of tankers today?

Secretary ROCHE. We meet the requirements today in the total number of tankers. It is the fact that over time this is going to become more difficult as we have scenarios that are around the world. But in fact we do meet all the requirements of the contingencies we have right now.

Senator INHOFE. Yes, but we do not know what contingencies we are going to have in the future.

Secretary ROCHE. That is the point.

Senator INHOFE. Are you personally comfortable? What is your comfort level with the number of tankers we have right now?

Secretary ROCHE. In terms of total numbers, it is not—I am not uncomfortable. It is in the reliability of the tanker force that I am uncomfortable.

Senator INHOFE. Second, one thing that has just been left out of this discussion has been the idea of centralized training. We have used centralized training on the C–141, C–5, C–17, and KC–135. It has been a successful program. Do you feel if this lease should go through or if any of the other arrangements that have been discussed here today should occur, that centralized training is desirable?

Secretary ROCHE. In the long run it most certainly is, sir. We typically take a new plane and train where they are first deployed and then migrate to a centralized position, and we would intend to do the same thing.

Senator INHOFE. In the case of the C–17s, I think the original purchase was 120. That decision was made I think when the 40th one was delivered. Does that time frame sound reasonable?

Secretary ROCHE. I would have to take a look and discuss with others. It is somewhere between there and 100, or maybe it is beyond 100. It depends on the aircraft and the amount of training that is being done, for instance, where we would like to go.

Senator INHOFE. Why would it be different with, say, a 767 and a C–17?

Secretary ROCHE. It may not necessarily be different, Senator. It may not necessarily be different.

Senator INHOFE. In retrospect, was not the C–17 program pretty successful?

Secretary ROCHE. It was very successful.

Senator INHOFE. All right, sir. Thank you very much.

Chairman WARNER. Thank you very much.

Senator ALLARD. Just one question, Mr. Chairman?

Chairman WARNER. We actually will go to Senator Levin for his 30 seconds, and 30 seconds with you, because I am very anxious to move to this next panel.

Senator LEVIN. Thank you, Mr. Chairman.

I want to just pursue something that Senator Allard asked. He read a long paragraph from the CBO report and the answer was that there was some confusion between the lease administrator and the trustee. I do not think that is the point this paragraph makes and so I am going to re-read it: "Under the operating guidelines for the financing committee," the CBO writes, and this is the financing committee of this trust, "the Air Force must approve all of the terms and conditions for the financing plan and must review and approve all financing documents. CBO concludes that the actions of that committee will be explicitly controlled by the Air Force."

My question of you, I think, Mr. Kaplan first, would be: Do you disagree with that?

Mr. KAPLAN. Senator, the SPE will continue to own this aircraft. For purposes of the A–11 analysis, the relevant question is whether the ownership remains with the lessor throughout the term of the lease. The answer in this case is that the lessor is the SPE.

Senator LEVIN. I understand. I know what you are saying. That is not my question. I am not asking you for a legal technicality. I am asking you for actual control. I think you know what I mean.

The question is, is CBO wrong in concluding that the actions of the committee will be controlled by the Air Force?

Mr. KAPLAN. Some of the actions of the committee, I think is the right answer, Senator.

Senator LEVIN. The important actions, the relevant actions, the key actions?

Mr. KAPLAN. Not for purposes of the A–11 analysis, Senator. I believe that refers to the financing terms of the transaction. It does not, for instance, refer to the sale of the aircraft at the end of the lease. That is, for the purposes of the A–11 criteria, determining whether this is an operating lease or a lease-purchase, it is the retention of ownership that is important.

Senator LEVIN. Is it not true that if in fact the Air Force decides to buy these that that financing committee must purchase?

Mr. KAPLAN. The Air Force has the option, yes, under the contract. The Air Force has the option, if Congress approves, to purchase the planes, absolutely.

Senator LEVIN. Right, and then the financing committee must buy; is that not correct? It must arrange to buy the aircraft?

Mr. KAPLAN. Yes, there is a contractual provision that there is an option to buy.

Senator LEVIN. Of course. Is it not true that the Air Force has a veto over any action of the financing committee?

Mr. KAPLAN. I would have to check. I think that is the case, but again the area of responsibility of the financing committee I believe is limited to the terms and conditions of the lease itself.

Senator LEVIN. So you do not agree with the statement of the CBO?

Mr. KAPLAN. As I said I think at the outset, there were parts of it I agreed with and parts that I did not, Senator.

Senator LEVIN. Just the one I read at the end, that the actions of that committee will be explicitly controlled by the Air Force? You just disagree with that statement?

Mr. KAPLAN. The financing committee I believe will be controlled by the Air Force in conjunction with the other members of the committee.

Senator LEVIN. Thank you.

Chairman WARNER. Senator Allard, a quick wrap-up.

Senator ALLARD. Mr. Chairman, I just want to make clear that I do think we have a need for new tankers and I want to see it done. I just have some concerns about how we are going to handle this from a budget point of view.

So my last question is that the trust that we have set up here—is this the first time this mechanism has ever been used? I asked this question yesterday of the CBO and he thought it was. Does OMB know whether this is the first time this process has ever been used in the budgeting process?

Mr. KAPLAN. Senator, I think it is fair to say that this very complex transaction is unique in many respects. As to whether a special purpose entity has ever been used, I cannot say. But there is no question that this is an extremely unique lease transaction.

Senator ALLARD. I am wondering. I wonder if you would confirm that and see as to whether it is the first time this has been used or not and get something back to me and the committee in that regard.

Mr. KAPLAN. We will do that, Senator.

[The information referred to follows:]

Trusts have been used as part of lease arrangements in the past. For example, the Veterans Administration has used trusts in at least eight building leases since 1986. In 1989, the Architect of the Capitol entered into a similar trust arrangement to finance the construction of the Federal Judiciary Office Building. The National Archives and Records Administration did the same in constructing the Archives II facility.

Senator ALLARD. Thank you.

Chairman WARNER. We will now proceed to the second panel. But before you depart, I would say to our witnesses that I feel that in a period of 3 hours we have had a very intense period of questioning here and I think the members of this committee are to be commended for the fairness of the questions and the sincerity to try and reach what, I cannot predict the conclusion, but would be a solution to a problem that is in the best interests, security interests, of this country and the taxpayers.

So we will now proceed to the second panel.

Secretary WYNNE. Thank you, Senator.

Secretary ROCHE. Thank you very much, Senators.

Chairman WARNER. We thank the witnesses of the second panel for their patience, but I believe that, and I hope you concur, that we had a very thorough exchange of viewpoints with the first panel.

This second panel will provide independent views on the specifics of the lease proposal. I want to welcome: Neal Curtin, Director, Defense Capabilities and Management at the GAO; Robert Sunshine, Assistant Director for Budget Analysis at the Congressional Budget Office; and Dr. Richard Nelson, Assistant Director, Cost Analysis and Research Division, Institute for Defense Analyses.

I thank you, gentlemen, for your willingness to appear today and express your views. We will place into the record your statements and the chair requests that you summarize your statements and then we will proceed to questions.

Mr. Curtin.

STATEMENT OF NEAL P. CURTIN, DIRECTOR FOR DEFENSE CAPABILITIES AND MANAGEMENT, U.S. GENERAL ACCOUNTING OFFICE

Mr. CURTIN. Thank you, Mr. Chairman and members of the committee.

About a year ago we provided this committee a report on our preliminary observations on the Air Force's negotiation as it stood at that time, and you asked us to take another look at this when the Air Force presented its proposal to Congress, which it did on July 10. So we have reviewed the Air Force proposal, and I appreciate the opportunity to be here today to present GAO's observations on issues that we hope are useful to the committee in its deliberations on this.

I will be very brief since my full statement is in the record. I will summarize a couple key points.

Chairman WARNER. I would like to ask you to draw up the microphone because there are a number of people in the audience, particularly those in the back, that are anxious to hear your statements.

Mr. CURTIN. Thank you.

First, the Air Force report acknowledges that leasing is more expensive, but its analysis indicates that a net present value difference of only $150 million favoring purchase out of a total program estimate of about $17 billion. Since this type of analysis is so sensitive to the assumptions used—and you went into great depth on that with the first panel—we reviewed some of those same analyses that the other panelists have.

The sensitivity analysis that we did shows that the cost difference in favor of purchase could be as much as $1.9 billion in net present value. That is an extra cost of over 10 percent for leasing versus the 1 percent shown in the Air Force report. We think that is a better reflection of the real difference between lease and purchase.

Second, the Air Force really does not make a case that leasing is cheaper. Instead, their main argument is that there is an urgent need to begin replacing the current tanker fleet and that leasing provides the aircraft earlier and completes the deliveries more quickly than purchase under the current budget constraints. Leasing would provide the first planes in August 2006, whereas under the current procurement plan in the Air Force budget they would not receive the first planes until fiscal year 2009.

In our view, the urgency of the need is really a matter of how much risk the Air Force and Congress are willing to accept. Now, the Air Force has not made replacement of the tanker fleet a procurement priority in past years. We pointed out as far back as our 1996 report that the Air Force needed to start planning to replace the aging fleet of KC–135s. At that time they were already 35 years old, and the Air Force said at that time in response to our report, and has continued to say up until about 18 months ago, that the tankers were a lower priority and replacement could wait until later in this decade.

KC–135s are increasingly difficult and expensive to maintain, there is no question about it. The Air Force has been able to meet the heavy demands of the past 2 years with the existing fleet. The risk is that the aging planes would incur some fleet-wide problem in the intervening years that would jeopardize the overall mission, and there is no way to predict how likely that is or how serious such a fleet-wide grounding might be.

The third point: Congress also needs to be aware that as part of the lease agreement DOD plans to contract with Boeing for logistics support that will total over $5 billion during the period of the lease, or an average of about $6.4 million per year per aircraft in fiscal year 2002 dollars. Boeing would handle all maintenance above the flight line level.

We do not know at this point to what extent the Air Force considered other options for maintenance. There was some discussion this morning that they are looking at public-private partnerships

and things like that. But there was no competition of this contracting provision for maintenance and there are many private contractors out there who perform maintenance now on commercial 767s.

We asked the Air Force for documentation on how they arrived at the maintenance agreement with Boeing and agreed on the price, but the documents the Air Force provided really did not shed much light on their basis for how they arrived at the price.

Fourth, there are some issues that Congress needs to consider when these leases expire, and there was some discussion of that earlier as well. At the end of these 6-year terms, the agreement says the aircraft are supposed to be returned to the owner. At that point the Air Force would have made lease payments of about 90 percent of the value of the aircraft, maybe more than 90 percent under different analysis there, and the Air Force would actually incur additional cost, estimated at about $778 million, to return the aircraft to this special purpose entity in the maintenance condition specified in the lease.

More importantly, if the Air Force in fact returns those airplanes they would be losing tanker capacity that would have to be replaced somehow. So in other words, if the Air Force really leases these planes for 6 years and turns them back in this proposal really does not make much sense at all, financially or militarily. So the very strong likelihood is that the Air Force will seek authority and funding to purchase the tankers at the expiration of the lease. So Congress should be aware that the full cost of this program should really include an additional $4 billion to account for the purchase cost at the end of the program.

Moreover, the tanker fleet consists of over 500 KC–135s, which all must be replaced eventually, or at least some portion of that 500, as the Secretary said. It may not be all 500. If the Air Force continues procurement beyond these first 100, the leasing proposal complicates the Air Force's budget situation in future years. Because leasing results in deferring payments until future years, the Air Force will still be making large lease payments on the first 100 aircraft at the same time it will need to commit funds to follow-on procurements, and that is the chart you showed earlier, Mr. Chairman.

In that chart it shows that at the peak of the lease payments you would also be reaching one of the peaks in your follow-on procurement of the second batch of airplanes. In that analysis, the Air Force could need as much as $6 billion per year in the 2012 to 2014 time frame just for tankers.

Chairman WARNER. That procurement you refer to is a capital acquisition——

Mr. CURTIN. Absolutely, yes.

Chairman WARNER.—vice lease.

Mr. CURTIN. Absolutely.

Just to sum up the key points: The lease proposal in our view is clearly more expensive than outright purchase, and by a greater amount than the Air Force analysis shows. So from a purely economic standpoint the proposal really does not provide the best return for the taxpayer. It really comes down to a judgment then of whether other factors outweigh the extra cost.

There is a need for new tankers, but the urgency of proceeding more quickly through this tanker proposal has really not been made strongly to us, because the problems of the KC–135s have been known for some time and yet the Air Force has not made tankers a priority for procurement funding.

I will stop there. My statement does raise additional issues that I would be glad to go into in the questions period and be glad to take whatever other questions you have.

[The prepared statement of Mr. Curtin follows:]

PREPARED STATEMENT BY NEAL P. CURTIN

Mr. Chairman and members of the committee: I appreciate the opportunity to appear before you today to discuss the Air Force's report on the planned lease of 100 Boeing 767 aircraft modified for aerial refueling. Aerial refueling is a key capability that is essential to the mobility of U.S. forces. Section 8159 of the Department of Defense Appropriations Act for Fiscal Year 2002 authorizes the Air Force to lease up to 100 Boeing 767 aircraft; the leased aircraft would be known by a new designation, KC–767A. The act also requires the Air Force to report to Congress with a description of the proposed lease terms and conditions and any expected savings before proceeding. The Air Force sent its report to Congress on July 10.

Last year, we provided you with information on the Air Force plan to lease KC–767A aerial refueling aircraft.[1] For this hearing, you asked for our analysis of the Air Force's business case and our views on the proposed lease arrangement. In my statement today, I will: (1) summarize the proposed lease as presented in the Air Force's recent report to Congress, (2) present our observations on the Air Force's lease report and its justification for the lease, and (3) identify related issues and costs that we believe Congress will want to consider as it assesses the Air Force's proposal.

To summarize and analyze the report of the proposed lease, we reviewed the report to Congress, examined the draft lease (which is still in negotiation and is subject to change), and reviewed documents and briefings from the Office of the Assistant Secretary of the Air Force for Acquisitions, Air Mobility Programs, to identify issues and costs that are material to the contract. We also reviewed the Air Force's analysis and data used in its analysis of the lease versus buy comparison as required by Office of Management and Budget (OMB) Circular A–94. Finally, we used data gathered for our ongoing review of tanker requirements being conducted for the House Armed Services Committee's, Subcommittee on Readiness.

BACKGROUND

Aerial refueling is critical to carrying out our national security strategy because it allows other aircraft to fly further, stay airborne longer, and carry more weapons, equipment, and supplies. While numerous military aircraft provide refueling services, the bulk of U.S. refueling capability lies with the Air Force's fleet of 59 KC–10 and 543 KC–135 aircraft. These are large, long-range aircraft that have counterparts in the commercial airlines but have been modified to turn them into tankers. The KC–10 is based on the DC–10 aircraft, and the KC–135 is similar to the Boeing–707 airliner. Because of their large numbers, the KC–135 is the mainstay of the refueling fleet, and successfully carrying out the refueling mission depends on the continued performance of the KC–135. Thus, recapitalizing the fleet of KC–135s will be crucial to maintaining aerial-refueling capability, and it will be a very expensive undertaking.

There are two basic versions of the KC–135 aircraft, designated the KC–135E and KC–135R. The R model aircraft has been refitted with modern engines and other upgrades that give it an advantage over the E model. The E model aircraft on average is about 2 years older than the R model, and the R model provides more than 20 percent greater refueling capacity per aircraft. The E model is located in the Air National Guard and Air Force Reserve. Active Forces have only the R model. Over half the KC–135 fleet is located in the Reserve components.

The rest of the Department of Defense's (DOD) refueling fleet consists of Air Force HC–130 and MC–130 aircraft used by Special Operations Forces, Marine Corps KC–130 aircraft, and Navy F–18 and S–3 aircraft. However, the bulk of refueling for

[1] *Air Force Aircraft: Preliminary Information on Air Force Tanker Leasing.* GAO–02–724R. Washington, DC: May 15, 2002.

Marine Corps and Navy aircraft comes from the Air Force KC–10 and KC–135. These aircraft are capable of refueling Air Force and Navy/Marine aircraft, as well as some allied aircraft, although there are differences in the way the KC–10 and KC–135 are equipped to do this.

The Air Force's Report on the KC–767A Aircraft Lease

Section 8159 of the Department of Defense Appropriations Act for Fiscal Year 2002,[2] which authorized the Air Force to lease the KC–767A aircraft, specified that the Air Force could not commence lease arrangements until 30 calendar days after submitting a report to the House and Senate Armed Services and Appropriations Committees that would (1) outline implementation plans and (2) describe the terms and conditions of the lease and any expected savings. At about the same time that the Air Force submitted the required report (on July 10, 2003), it submitted a New Start Notification[3] and stated that it would not proceed with the lease until it received approval from all of the committees. The House and Senate Appropriations Committees and the House Armed Services Committee approved the new start in July. We previously testified before the House Armed Services Committee and its Subcommittee on Projection Forces, and we issued a briefing report in 2002 on the status of the proposed lease to date (see our Related GAO Products page for a complete list of products to date related to refueling requirements and the proposed lease).

The key elements of the Air Force's proposal, as presented in the report to Congress, are summarized below:

- The Air Force proposes to lease 100 KC–767A aircraft for 6 years each; the first aircraft would be delivered in August 2006 and the final ones by the end of 2011. Leases on the final group of aircraft would terminate in 2017. The report indicates that the total program for the leased aircraft would cost about $17.2 billion in net present value over the lease period.[4]
- The Air Force's report includes an analysis required by OMB Circular A–94 comparing the net present value of the lease approach against that of purchasing the aircraft. The Air Force acknowledges that its analysis indicated that purchase would be cheaper than leasing by about $150 million in net present value terms. Nevertheless, it proposes to use the leasing approach because it allows the Air Force to take delivery of the aircraft more quickly than it could through purchase (and avoid creating major disruptions to other procurement programs for which funding has already been identified in the Future Years Defense Program). Specifically, the Air Force said that if the aircraft were purchased at the same rate as planned under the lease, it would need $5 billion more funding through fiscal year 2006 and more than $14 billion more for the 6 years reflected in the Future Years Defense Program. Under the procurement budget plan that the lease would replace, the Air Force would not begin acquiring new tankers until fiscal year 2009 and would not have 100 new tankers until 2016, 5 years later than planned through the lease.
- The key justification for the lease, according to the Air Force, is an urgent need to replace the current fleet of KC–135 aircraft. The Air Force has stated that the KC–135 is aging and becoming increasingly costly to operate owing to corrosion, the need for major structural repair, and increasing rates of inspection to ensure air safety. Moreover, the report indicates that the Air Force believes it is incurring a significant risk by having 90 percent of its aerial-refueling capability in a single, aging airframe and that a "fleet grounding" event could jeopardize the tanker's mission.[5]
- The Air Force plans to award a contract to a special purpose entity (SPE), a trust to be created under the laws of Delaware, that will issue bonds to

[2] Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, 2002, Pub. L. No. 107–117, §8159, 115 Stat. 2230, 2284–85 (2002).

[3] The New Start Notification, submitted to the Armed Services and Appropriations Committees on July 11, 2003, was required by section 133 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003, and is being used by the Air Force as the trigger for executing the lease. Pub. L. No. 107–314, §133, 116 Stat. 2458, 2477 (2002).

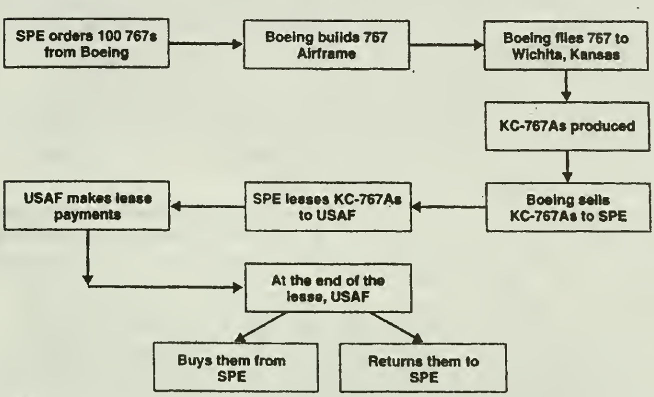
[4] When costs and benefits are evaluated over time, a net present value calculation is used to account for the time value of money through an interest rate called a "discount rate."

[5] A fleet grounding event would involve some systemic problem or equipment failure affecting all aircraft of the same type and would be serious enough to require replacement before the aircraft could resume normal operations.

raise sufficient capital to purchase the new aircraft from Boeing and lease them to the Air Force.[6]

• The entity is to issue bonds on the commercial market based on the strength of the lease and not the creditworthiness of Boeing. The lease is part of a three-party contract between the Air Force, Boeing, and the SPE. Figure 1 depicts the relationships of the three parties to the contract and the transactions that are to take place under the contract, once it is signed.

Figure 1: Diagram of the Relationships of the Parties to the Contract and the Transactions That Are to Take Place Under the Contract



Source: GAO.

• Office of Management and Budget Circular A–11 requires that an operating lease meet certain terms and conditions, including a criterion that the net present value of the lease payments not exceed 90 percent of the fair market value of the asset at the time that the lease is initiated. The report to Congress states that DOD believes the proposed lease meets those criteria and that payments over the life of the lease will be equal to 89.9 percent of the fair market value of the aircraft. At the same time, the report points out that the percentage is based on the cost to buy the aircraft—$131 million plus the cost of construction financing of $7.4 million, for a total of $138.4 million. If the fair market value is assumed to be the cost to buy the aircraft, then the lease payments represent about 93 percent of the fair market value and would not meet the requirement.

• If Boeing sells up to 100 comparable aircraft during the term of the contract to another customer for a lower price than that agreed to by the Air Force, the government would receive an “equitable adjustment.” The report also states that Boeing has agreed to a return-on-sales cap of 15 percent and that an audit of its internal cost structure will be conducted in 2011, and that any return on sales exceeding 15 percent would be reimbursed to the government.

• According to the report, if the government were to terminate the lease, it must: (1) do so for all of the delivered aircraft, and any aircraft for which construction has not begun, (2) give 12 months advance notification prior to termination, (3) return the aircraft, and (4) pay an amount equal to 1 year’s lease payment for each aircraft terminated. If termination occurs before all aircraft have been delivered, the price for the remaining aircraft would be increased to include unamortized costs incurred by the contractor that would have been amortized over the terminated aircraft and a reasonable profit on those costs.

• The government will pay for and the contractor will obtain commercial insurance to cover aircraft loss and third-party liability as part of the lease agreement. Aircraft loss insurance is to be in the amount of $138.4 million

[6] The special purpose entity would pay the interest on the bonds using lease payments it receives from the Air Force and would pay off all the bonds at the conclusion of the lease term.

per aircraft in calendar year 2002 dollars. Liability insurance will be in the amount of $1 billion per occurrence per aircraft. If any claim is not covered by insurance, the Air Force will indemnify the special purpose entity for any claims from third parties arising out of the use, operation, or maintenance of the aircraft under the contract.

- At the expiration of the lease, the Air Force can return the aircraft to the SPE after removing, at government expense, any Air Force-unique configurations added by the Air Force after delivery of the aircraft from the SPE. Alternatively, the Air Force also has the option to purchase the aircraft at residual value (the estimated value of the aircraft after the lease term ends). However, the purchase can take place only if it is authorized and funded by Congress at or before the expiration of the lease.
- The contractor will warrant that each aircraft will be free from defects in materials and workmanship and that the warranty will be of 36 months' duration and will commence after construction of the commercial Boeing 767 aircraft but before they have been converted into aerial-refueling aircraft. Upon delivery to the Air Force, each KC–767A aircraft will carry a 6-month design warranty, 12-month material and workmanship warranty on the tanker modification, and the remainder of the original warranty on the commercial components of the aircraft, estimated to be about 2 years.

Our Analysis of the Air Force's Report and Lease Proposal

I will now present our observations on the Air Force's lease report to Congress and on some of the details of the lease proposal. We believe there are a number of aspects of the report and lease that Congress needs to be aware of in considering the Air Force's proposal, including the following:

- The cost differential between leasing and purchasing was presented by the Air Force as about $150 million favoring purchase in net present value terms, although the differential can rise to $1.9 billion favoring purchase, depending upon the assumptions used. For example, according to the Air Force report to Congress, had Congress provided multiyear procurement authority and had DOD been able to accommodate that while preserving "program stability," the net present value could favor purchase by up to $1.9 billion.
- The Air Force report states that there is an urgent need to begin tanker replacement 3 years earlier than previously planned, but until recently, recapitalization of the fleet has not been a high enough priority in the Air Force budget to successfully compete for funding.
- The Air Force proposal may not meet all the criteria specified by OMB to qualify as an operating lease since the Air Force would pay 93 percent of the fair market value of the aircraft if construction financing were not assumed to be included in the fair market value of the aircraft.
- As required by section 8159 of the fiscal year 2002 Defense Authorization Act, the Air Force report to Congress was limited to the costs of leasing the aircraft. However, the report does not present the total costs of this program, including the costs to acquire the aircraft at the expiration of the lease or to maintain the aircraft during the period of the lease.

Net Present Value Analysis

OMB Circular A–94 specifies that whenever a Federal agency needs to acquire the use of a capital asset, it should do so in the way that is least expensive to the government as a whole and further specifies how a lease versus purchase analysis should be conducted. Specifically, the circular directs a net present value comparison between the proposed lease and a hypothetical purchase on the basis of the same delivery and return profile. This approach permits an accounting for the time-value of money.

In its report to Congress, the Air Force's net present value calculations between the proposed multiyear lease and a hypothetical purchase indicate that purchasing the aircraft would be cheaper than leasing by about $150 million; however, the report contains a footnote indicating that the net present value could favor purchase by an additional $1.7 billion (for a total of $1.9 billion less in costs compared with leasing). The $1.7 billion is based on four assumptions (all in net present value terms). First, the Air Force assumes that using a multiyear contract [7] for purchasing the aircraft would lead to $900 million in savings. Second, the Air Force assumes

[7] In multiyear procurement, all items are bought under one contract as opposed to a series of annual contracts.

that using a shorter span of time for the period when progress payments[8] are made would lead to another $200 million in savings. Third, it assumes that if a shorter span of time for calculating inflation for progress payments is used, then savings of $500 million will occur. Fourth, it assumes that if a 30 percent discount on the imputed cost of insurance is included (since the government self-insures), savings of $100 million will occur.

The net present value analysis is also sensitive to the appropriate discount rate and other expected inflation. The Air Force followed OMB guidance contained in Circular A–94 in doing its analysis, to include using the discount rate of 4.1 percent. Our analysis shows that a 1-percentage point change in the discount rate can cause a change of over $660 million in the net present value results. Table 1 shows the sensitivity of the net present value analysis to different discount rates, including the discount rate of 4.2 percent that we would use on the basis of the July 10, 2003, date on which the report to Congress was issued.[9]

TABLE 1: SENSITIVITY ANALYSIS OF DISCOUNT RATES FOR THE A–94 ANALYSIS

[In millions of dollars]

Discount rates in percentages	Net present value of leasing minus purchase
3.5	$567.6
4.1 (Air Force discount rate)	154.7
4.2 (GAO discount rate)	89.5
4.5	–100.4

Sources: Air Force (data); GAO (analysis).

The assumptions being used for the analysis regarding rates of expected inflation for construction of the aircraft, for military construction of facilities, and for operation and maintenance are reasonable; however, if the actual cost increases for the construction of the aircraft are higher than the assumed cost increases in the Air Force analysis, the cost of leasing will be higher than the cost presented in the report to Congress. The reverse could also be true.

Urgency of Tanker Replacement

In its report to Congress, the Air Force stated that “our National Security Strategy is unexecutable without air refueling tankers” and that “the risks involved with indefinitely operating a fleet of aging aircraft are unacceptable.” These statements indicate that tankers are, or should be, a very high priority; however, the Air Force has for many years faced the issue of an aging KC–135 fleet and yet has not planned, until recently, to begin replacing them.

After reviewing a wide variety of Air Force reports and documents as well other documents, we have concluded that neither the Air Force nor DOD have been willing to make the difficult decision to reallocate procurement funds from other programs in the near term. For example, the Air Force put a replacement tanker program (known as the “KC–X”) in its submission for the President’s fiscal year 2004 budget. But in view of “affordability constraints” in the near term, the program would not begin to be funded until fiscal year 2006, and the first aircraft would be delivered in fiscal year 2009.

Until the authority to lease tanker aircraft was established by section 8159 of the fiscal year 2002 Department of Defense Appropriations Act, we did not perceive that concern within the Air Force about the condition of its KC–135 fleet was serious enough to successfully compete with other programs for funding. Instead, the Air Force has expressed belief in the necessity of continuing to operate and sustain the 540-plus aircraft fleet for several more decades, and it has also expressed confidence in its ability to do so, as illustrated in the following:

- In our 1996 report on aging tanker aircraft,[10] we stated that procurement of a commercial-derivative aircraft could take as long as 4 to 6 years and

[8] Progress payments, which are made to contractors before they deliver items, reduce contractors’ financing costs and in turn result in a lower purchase price for the government.

[9] The Air Force used a 9-year discount rate from Appendix C of Circular A–94, which is revised annually. The date of the revision used by the Air Force was January 2003. GAO policy for determining a discount rate is that it should be the interest rate for marketable U.S. Treasury debt with maturity comparable to the term of the project being evaluated. On the basis of the date the report was issued, the discount rate that we would use would be 4.2 percent.

[10] *U.S. Combat Air Power: Aging Refueling Aircraft Are Costly to Maintain and Operate,* GAO/NSIAD–96–160 (Washington, DC: August 8, 1996).

that development of a new aircraft could take up to 12 years. Therefore, we stated, the Air Force will need to quickly initiate studies to develop a replacement strategy for mobility aircraft and should consider a multirole aircraft that could be used for air mobility as well as aerial refueling. In response, DOD stated that "while the KC–135 is an average of 35 years old, its airframe hours and cycles are relatively low. With proper maintenance and upgrades, we believe the aircraft may be sustainable for another 35 years." Thus in 1996, the Air Force was planning to continue to rely on the KC–135 aircraft until about 2030. The Air Force's comments notwithstanding, we pointed out at the time of our report that the long-term serviceability of the aircraft was questionable and we continue to believe it.

• *The KC–135 Aircraft Sustainment Master Plan (1997),* an Air Force strategic guide for investment, repair, and modification decisions, concluded that "with continued aggressive maintenance, the KC–135 will fly safely well beyond the fiscal year 1997–2002 time frame." The report added that the aircraft can continue to be a safe and affordable weapon system that will meet the operational requirements well into the next century "if there is a consistent investment in maintenance and the aging aircraft programs."

• The Air Mobility Command's Air Mobility Strategic Plan for 2002 (October 2001) established a time frame of fiscal year 2008–2013 to begin fielding an updated fleet of refueling aircraft. However, the report also identified additional problems hampering operations, including tanker aircraft and aircrew shortfalls, an increase in the number of KC–135 aircraft in the depot, and a decrease in mission capable rates. The strategic plan acknowledged that the KC–135 Programmed Depot Maintenance Improvement Plan had been developed to reduce the number of aircraft in the depot. In addition, the strategic plan indicated that an Analysis of Alternatives would be conducted over the next 2 years to determine the most effective solution set to meet the Nation's future air-refueling requirements, although, to our knowledge, the analysis has not been done yet.

• In the *Mission Need Statement: Future Air Refueling Aircraft* (AMC 004–01, November 2001), the commander of the Air Mobility Command (AMC) stated that the "Air Mobility Command's priority is to continue with C–17 acquisition and C–5 modernization in the near term. As the airlift priority is met, AMC will begin to shift resources to address the next air refueling platform in the mid- to long-term. Air Mobility Strategic Plan 2000 envisions KC–135 aircraft retirement beginning in 2013 with the concurrent fielding of a replacement air refueling platform." The mission need statement also stated that "definition of future air refueling mission needs and examination of opportunities for technology enhancement must begin in the near-term."

• In a May 2002 response to our briefing on our preliminary analysis to the Senate Armed Services Committee of the planned tanker lease, the Air Force stated that while it had programmed funds for a traditional replacement tanker since 2001, the first new aircraft would not enter the fleet until fiscal year 2009. The Air Force maintains an aggressive program of inspection and repair to keep the KC–135 fleet operational and to meet mission requirements. Consequently, while the KC–135 fleet was built from 1957 through 1965, significant portions of the aircraft have been upgraded or modified in the intervening years.

• From 1975 through 1988, the Air Force replaced about 1,500 square feet of the aluminum skin on the underside of the wings of most KC–135 aircraft with an improved aluminum alloy that was less susceptible to fatigue. In addition, engine strut fittings were replaced.

• Beginning in the mid-1980s, the Air Force began to replace the engines of the original KC–135A aircraft. Over 410 KC–135 aircraft have been converted to the R model by installation of fuel-efficient, quiet F108 (CFM–56) engines that enhanced the aircraft's performance and capability. In addition to new engines, this modification includes 25 other changes per plane, including reinforced floors, new and strengthened landing gear, reinforced wing structures, new engine struts, and over 12 miles of wiring.

• The Air Force modernized the cockpits on all of its KC–135 tankers through a program called PACER CRAG (compass, radar, and Global Positioning System receiver) to enhance reliability, maintainability, and capability.

• In addition to specific large-scale, fleet wide upgrade programs such as those that I described above, most aircraft have had major structural com-

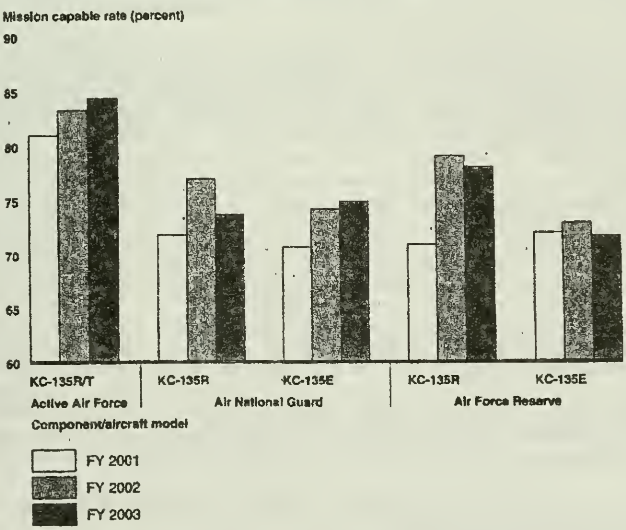
ponents replaced as necessary. Moreover, if—as KC–135 aircraft undergo their periodic programmed depot maintenance—trend analyses indicate the potential for fleet wide problems, some major components may be replaced on all aircraft. Examples of some of these major structural repairs include segments of fuselage skins, floor beams, fuselage bulkheads, and upper wing skins. As components such as these are replaced, the use of new and improved materials, fabrication, and corrosion prevention techniques are designed to solve problems and to last for the remaining life of the aircraft. In the case of the upper wing skins, for example, the Air Force reported, "as we work through the fleet, this level of replacement will decrease as most of the bad skins have been or shortly will be replaced. Replaced skins are installed with attention to corrosion prevention and should last more than 40 years."

Despite the Air Force's aggressive maintenance and upgrade programs to keep the KC–135 mission capable, since 2001, the Air Force has come to believe that the condition of the fleet has deteriorated to the point where replacement has become more urgent. For example, Air Force officials have cited the Air Force's Economic Service Life Study, which showed that program depot maintenance has become increasingly costly on the KC–135. Air Force officials told us that the E-model of the KC–135 is currently operating under flight restrictions owing to corrosion.

The KC–135 fleet averages over 40 years in age, but the aircraft have relatively low levels of flying hours. Flying hours for the KC–135 averaged about 300 hours per year from 1995 through September 2001. Since then, utilization is averaging about 435 hours per year. The Air Force projects that E and R models have lifetime flying hour limits of 36,000 and 39,000 hours, respectively—according to the Air Force, only a few KC–135 aircraft would reach these limits before 2040, at which time some of the aircraft would be about 80 years old.

The KC–135 fleet has not been meeting its mission capable rate goal. Mission capable rates measure the percentage of time on average that the aircraft are available to perform their assigned mission. The Air Force has a goal of an 85-percent mission capable rate for the KC–135 fleet. As shown in figure 2, KC–135 aircraft have not met the 85 percent mission capable rate in any of the last 3 fiscal years, although aircraft in the Active component have consistently reached a mission capable rate of over 80 percent.

Figure 2: Average Annual Mission Capable Rates for KC-135 Aircraft by Service Component and Aircraft Type, Fiscal Year 2001 – Fiscal Year 2003 (July)



Source: Air Force.

Note: Fiscal year 2003 includes data through July 2003.

By most indications, the fleet has performed very well during the past few years of high operational tempo. Operations in Kosovo, Afghanistan, Iraq, and here in the United States in support of Operation Noble Eagle were demanding, but the current fleet was able to meet the mission requirements. Approximately 150 KC–135 aircraft were deployed to the combat theater for Operation Allied Force in Kosovo, about 60 for Operation Enduring Freedom in Afghanistan, and about 150 for Operation Iraqi Freedom.[11] Additional KC–135 aircraft provided "air bridge" support for the movement of fighter and transport aircraft to the combat theater, for some long-range bomber operations from the United States, and to help maintain combat air patrols over major U.S. cities since September 11, 2001.

According to Air Force projections, the KC–135 operating and support costs will increase substantially in the coming years. The costs for the current fleet totaled about $2.4 billion in fiscal year 2002 (2002 dollars). The Air Force projects that the cost will total about $3.5 billion (2002 dollars) in fiscal year 2012 for a fleet of 510 aircraft. According to Air Force officials, increased programmed depot maintenance costs were a significant cause of the increase. The officials said that, based on historical experience, programmed depot maintenance costs are expected to increase about 18 percent per aircraft per year. By the same projections, the operating and support costs for the fleet of 100 KC–767A aircraft will total about $808 million.[12]

The concept of an aging KC–135 fleet, and the problems and costs associated with operating and sustaining old aircraft, is not a sudden manifestation, but rather a fact of life that the KC–135 support infrastructure has had to deal with for years. Many of the problems currently being reported as reasons to begin tanker recapitalization immediately—including corrosion, increasing operating and support costs, and reduced aircraft availability—are not new and were issues that the Air Force was addressing in the mid-1990s, when we last examined aerial-refueling matters and when the Air Force concluded that recapitalization was not urgent.

Operating Lease Requirements

OMB Circular A–11 provides certain criteria that must be met for an operating lease:

- Ownership must remain with the lessor throughout the term of the lease and is not to transfer at or shortly after the end of the lease period.
- No bargain price purchase option is allowed.
- The lease term may not exceed 75 percent of the asset's economic lifetime.
- The present value of the minimum lease payments cannot exceed 90 percent of the fair market value of the asset at the beginning of the lease term.
- The asset must be a general-purpose asset and not government-unique.
- The asset must have a private-sector market.

The Air Force report says that the proposal complies with all of the criteria.

However, the report also points out that, depending on the fair market value used, the net present value of the lease payments in the case of the KC–767A may exceed the 90 percent of initial value threshold. On the one hand, if the fair market value is considered to include the cost of construction financing of $7.4 million per aircraft (or $740 million for all 100 aircraft),[13] then the lease payments are estimated to represent 89.9 percent. This is the formula that the Air Force used to document compliance with the circular and which the Air Force cited in its report to Congress; it results in a cost of $138.4 million per aircraft. On the other hand, if the fair market value excludes construction financing, it totals $131 million per aircraft, and the lease payments represent 93 percent, thus exceeding the 90 percent threshold. According to the Air Force report, construction financing, however, must be included to meet the OMB Circular A–11 requirement.

However, it is not clear that including the construction financing represents the fair market value of the aircraft. The SPE will borrow money on the commercial market to raise funds to pay Boeing to finance construction of the aircraft and will repay the banks up to $7.4 million in interest on the loans per aircraft. Once constructed, the aircraft will be delivered to the SPE, and the SPE will pay Boeing $131 million less the amount of financing already paid to Boeing for the aircraft. The Air Force will then lease the aircraft for up to $138.4 million per aircraft over

[11] Air Force officials told us that combat commanders refused to permit the E-model of the KC–135 to be deployed to recent combat theaters.

[12] The projections assume that the KC–135Es and KC–135Rs will fly 308 and 368 hours per year while the KC–767A will fly 750 hours per year.

[13] Construction financing will be raised by the special purpose entity through borrowing in order to make progress payments.

the life of the lease. Consequently, the $7.4 million (reported by the Air Force as construction financing) represents interest on the loans to the SPE, and it is not clear that interest should be included in the fair market value of the aircraft.

Total Cost of the Program

While the Air Force report includes the cost of leasing and other government costs such as training, as well as operations and support, the report does not include the costs of buying the tankers at the end of the lease.[14] At the end of each 6-year lease, the aircraft are to be returned to the owner, the SPE, or they can be purchased by the Air Force for their residual value, estimated at about $44 million each in then-year dollars. If the aircraft are returned, the Air Force tanker fleet will be reduced, and the Air Force will have to find some way to replace the lost capability. In other words, the lease payments will have paid almost the full cost of the aircraft, and then the capability would be lost. Thus, the total cost of this 100-aircraft program should include the eventual acquisition cost. In addition to the cost to lease and subsequently purchase the aircraft, Air Force operations and support costs range from $4.6 billion to $6.8 billion, depending on which dollar calculation is used. The Air Force also plans to construct new facilities and would incur other costs ranging from $1.2 billion to $1.5 billion. Table 2 summarizes total cost in three different dollar calculations—then-year (or current) dollars, constant fiscal year 2002 dollars, and net present value.[15]

TABLE 2: ESTIMATED COST OF THE CONTRACT TO LEASE, MAINTAIN, AND PURCHASE 100 KC-767A AIRCRAFT UNDER THREE DIFFERENT TYPES OF ANALYSIS

[In billions of dollars]

Category	Net present value	Constant fiscal year 2002 dollars	Then-year dollars
Lease payments with aircraft return	$11.4	$12.3	$16.3
Aircraft purchase and other costs	3.1	3.4	5.2
Subtotal	14.5	15.7	21.5
Operations and Support	4.6	5.7	6.8
Military construction and other costs	1.2	1.3	1.5
Lease-buy Total	$20.3	$22.7	$29.8

Sources: Air Force (data). GAO (analysis).

In addition, the Air Force will have to pay an additional estimated $778 million if the entire 100 aircraft are returned, to ensure that the aircraft are returned in the maintenance condition specified in the lease. For these reasons, returning the aircraft would probably make little sense, and Congress will almost certainly be asked to fund the purchase of the aircraft at their residual value as the lease expires.

Related Issues and Concerns

Our preliminary analysis indicates that certain other costs associated with the lease may deserve further examination by Congress. Specifically, we have concerns related to contractor logistics support, the extent of Boeing's profit margin, and the impact of the lease on follow-on tanker acquisitions.

Contractor Logistics Support

The Air Force estimates that the maintenance agreement with Boeing will cost between $5 billion and $5.7 billion during the lease period. It has negotiated a non-competitive agreement with Boeing as part of the lease negotiations, covering all

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[14] The Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, 2002, Pub. L. No. 107–117, § 8159, 115 Stat. 2230, 2284–85 (2002) required that the Air Force report on the costs to purchase or lease the aircraft but did not require that other costs be reported.

[15] Current dollars or then year dollars are the dollar value of a good or service in terms of prices at the time the good or service is sold. These contrast with constant dollars, which measure the value of purchased goods or services at price levels that are the same as those for the base year. Constant dollars do not contain any adjustments for inflationary changes that have occurred or are forecasted to occur outside the base year. When costs and benefits are evaluated over time, a net present value calculation is used to account for the time value of money through an interest rate called a "discount rate."

maintenance except flight-line maintenance, which is to be done by Air Force mechanics. This represents an average of about $6.4 million per aircraft per year in fiscal year 2002 dollars. We do not know how the Air Force determined that this was a reasonable price or whether competition might have yielded savings because the Air Force did provide sufficient documents on a timely basis for us to evaluate its price analysis. A number of commercial airlines and maintenance contractors already maintain the basic 767 commercial aircraft and could possibly do some of the required maintenance if given the opportunity to compete for the contract.

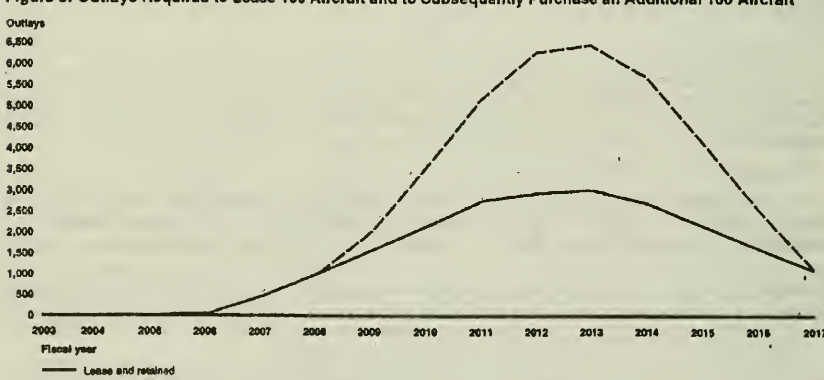
Profit Margin

The Air Force report indicates that Boeing can earn no more than a 15-percent profit on the Boeing 767 aircraft and that an audit will be conducted after the final planes are delivered to ensure that the company's profit does not exceed that amount. However, since this aircraft is basically a commercial 767 with modifications to make it a military tanker, it is not clear why the 15-percent profit should apply to the full cost. One financial analysis published recently states that Boeing's profit on commercial 767 aircraft is in the range of 6 percent.[16] If the Air Force negotiated a lower profit margin on that portion of the cost, with the 15-percent profit applying only to the military-specific portion, this could lower the cost by several million dollars per aircraft. For example, assuming the commercial tanker portion of the cost is about $80 million, the difference between profits of 6 percent and 15 percent would be about $7 million per aircraft, or $700 million for all 100 aircraft.

Effect on Follow-on Tanker Acquisitions

One of the key advantages of leasing is that it enables the Air Force to take delivery of aircraft without the large, up-front obligation of funds required for purchase; thus by the end of fiscal year 2011, the Air Force will have received 100 new tankers. The flip side of this, however, is that payments are spread out over many years and represent an obligation that must be met throughout the term of the lease. The Air Force will be making lease payments on the leased aircraft through fiscal year 2017, and will likely pay about $4.4 billion (in then-year dollars) in fiscal years 2012–2017 to purchase the aircraft at the expiration of the lease. Funds spent during those years on these 100 aircraft are therefore funds that are not available for the procurement of additional tanker aircraft that will be needed to replace the remaining 400-plus aircraft in the KC–135 fleet. If the Air Force wants to procure additional tankers starting in this 2012–2017 period, it will need an even larger budget during those years to accommodate both the continuing lease payments and new procurement. Figure 3 illustrates the annual outlays that would be required to lease the aircraft as proposed and the additional outlays needed to purchase an additional block of 100 aircraft. This assumes that delivery of the additional aircraft would begin after the first 100 had been delivered. If additional aircraft are to be obtained before the planned end of delivery of the first 100 leased aircraft in 2011, then the additional funds for the second block of aircraft would be needed even sooner.

Figure 3: Outlays Required to Lease 100 Aircraft and to Subsequently Purchase an Additional 100 Aircraft



Source: GAO analysis of Air Force data.

[16] See Morgan-Stanley, *Does 767 Tanker Equate to 700+ Comml Orders?*, (May 30, 2003).

Mr. Chairman, this concludes my prepared statement. I would be happy to answer any questions that you or members of the committee may have.

Contacts and Staff Acknowledgments

For future questions about this statement, please contact me at (757) 552–8111 or Brian J. Lepore at (202) 512–4523. Individuals making key contributions to this statement included Kenneth W. Newell, Tim F. Stone, Joseph J. Faley, Stephen Marrin, Kenneth Patton, Charles W. Perdue, and Susan K. Woodward.

RELATED GAO PRODUCTS

Military Aircraft: Observations on the Air Force's Plan to Lease Aerial Refueling Aircraft. GAO–03–1143T. Washington, DC: September 3, 2003.

Military Aircraft: Considerations in Reviewing the Air Force Proposal to Lease Aerial Refueling Aircraft. GAO–03–1048T. Washington, DC: July 23, 2003.

Military Aircraft: Information on Air Force Aerial Refueling Tankers. GAO–03–938T. Washington, DC: June 24, 2003.

Air Force Aircraft: Preliminary Information on Air Force Tanker Leasing. GAO–02–724R. Washington, DC: May 15, 2002.

U.S. Combat Air Power: Aging Refueling Aircraft Are Costly to Maintain and Operate. GAO/NSIAD–96–160. Washington, DC: August 8, 1996.

Chairman WARNER. Mr. Sunshine.

STATEMENT OF ROBERT A. SUNSHINE, ASSISTANT DIRECTOR FOR BUDGET ANALYSIS, CONGRESSIONAL BUDGET OFFICE

Mr. SUNSHINE. Thank you, Mr. Chairman. I would like to start by expressing the regrets of our director, Dr. Holtz-Eakin, who would have liked to be here to testify this morning. He is a very capable fellow, but he could not be in two places at one time, and he had to testify before the House Budget Committee on our new economic analysis.

I would also like to acknowledge the fine work of our analyst who did our analysis of this transaction, David Newman, who is here with me.

CBO's analysis was performed at the request of Senator Nickles, chairman of the Budget Committee. It is presented in my written testimony, which I will summarize this morning. That analysis is pretty limited in its scope. CBO has not analyzed the need for new tankers. It has not analyzed possible alternatives to acquiring new tankers or the impact on our defense capabilities of this tanker acquisition decision.

Our analysis and my testimony address only the proposed financing mechanism, its long-term costs, and its budgetary treatment. In that regard, I would like to make three major points this morning.

First, the objective of the proposed transaction is to get new tankers into the hands of the Air Force as quickly as possible while avoiding any significant budgetary impact in the next few years. However, CBO believes that if this transaction is treated properly in the budget, it should be shown as a purchase of the tankers by the Government and therefore would require substantial up-front budget authority.

Second, the proposed transaction will result in costs to the government over the next 14 years that are $5 billion to $6 billion more than would result from a straightforward purchase of the same aircraft with the same delivery schedule, using a multiyear procurement arrangement. Discounted to this year's dollars and depending on the exact methodology one uses to do so, the additional cost is between $1 billion and $2 billion in net present value terms. There seems to be a broad consensus on that.

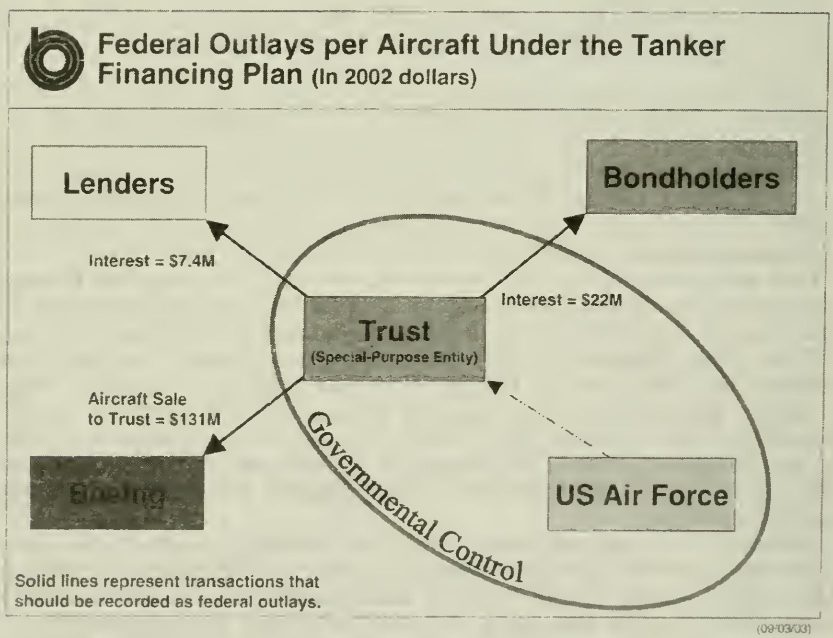
Third, these types of transactions have ramifications beyond the defense budget and beyond national security concerns. Each year in its budget resolution, Congress sets a limit on discretionary budget authority, and it allocates that sum among various functions. Sometimes, Congress sets these limits in law for a number of years. Presumably, those figures represent Congress' best judgment as to the amount of discretionary obligations that it believes the government should enter into during that time period.

Transactions that create obligations of the government that are not recorded as obligations of the government make these budgetary limits less meaningful and less effective.

I will elaborate briefly on each of these points. When one steps back from the technical and financial intricacies of this proposal, it becomes clear, at least to us, that the arrangement is simply a governmental purchase of the tanker aircraft. The purchase is being made by the special-purpose entity created specifically to borrow money on behalf of the government in order to buy aircraft for the government. These borrowing arrangements will be overseen by and must be approved by the government, and the trust has no other function.

Thus, as you can see in this chart, which you have all seen, we view the trust as an instrument of the government, and we think that the budget should reflect the transactions of the trust as transactions of the government.

[The information referred to follows:]



That would require about $17 billion in budget authority over the 2004 to 2008 period and would result in outlays of a similar amount from 2004 to 2011.

In our view, the lease payments from the Defense Department to the trust are essentially intragovernmental, basically the government paying itself. The real budgetary transaction here is the government's purchase of the aircraft through the trust.

It does not look like the administration is going to treat the transaction this way. The Air Force plans to treat the trust as an independent private-sector entity and to record these transactions as an operating lease. That would mean recording the lease payments in the budget year by year as they were paid. Such a treatment would have the effect of deferring the budgetary impact of buying these aircraft for several years. Instead of $17 billion in budget authority over the 2004 to 2008 period, the agency will need less than $2 billion, and that in fact is the stated objective of the proposal.

But even if one does not accept our view that the trust should be treated as an instrument of the government, we find it difficult to see how this could be considered an operating lease. We have discussed and members have pointed out that there are six criteria specified in OMB Circular A–11 for an operating lease. This arrangement meets hardly any of them.

For example, the asset is supposed to be a general-purpose asset that is not built to the unique specification of the government and for which a private-sector market exists. Basically, operating leases are intended to apply to widely used, commercially available assets like automobiles and commercial office space. Aircraft refueling tankers are very different. They are highly specialized assets, used almost always for governmental purposes, and there is very little, if any, private-sector market for them.

In addition, the asset is not supposed to be transferred to the government at or shortly after the end of the lease term, and the lease is not supposed to contain a bargain-price purchase option. Under this proposal, the Air Force is planning to buy the aircraft after the 6-year leases expire and would be able to do so at a pretty low price.

Therefore, we believe that if the trust is to be considered nongovernmental, which is not what we think it should be, then this financing arrangement should be treated in the budget as a lease-purchase, which would require up-front budget authority and outlays similar to those for a direct purchase. So whether the trust is viewed as governmental or not, we believe that if the government's standard budgetary principles are properly applied, the proposed arrangement would not accomplish its aim of deferring the budgetary impact of the aircraft purchases.

My second point is that this transaction will cost more than a straightforward purchase. We estimate that the transaction as it is structured will cost taxpayers between $5 billion and $6 billion more between now and 2017 than a straightforward purchase through the appropriations process of the same planes with the same delivery schedule and the same maintenance and operating costs.

The second chart in your handout, with the three sets of numbers, displays how we think these figures play out over time. The first set of numbers describes our estimate of the transaction if it is treated as a purchase or a lease-purchase, in other words, the

proposed transaction as we believe it should be treated. The second set of numbers shows how we think it would be treated if it is recorded as an operating lease. The third set of numbers shows what we think it would be as a direct purchase of the tankers up front under the same timetable.

[The information referred to follows:]

Comparison of Costs Between a Direct Purchase and the Air Force's Proposal (In billions of dollars)

Direct Purchase		Air Force's Proposal	
Procurement Costs	14.9	Lease Payments	16.6
Nonrecurring Engineering Costs	0.6	Purchase at End of Lease	4.4
Insurance	0.4	Insurance	0.4
		Other Lease Costs	*
Total	15.9	Total	21.5
Present Value	13.6	Present Value	14.9

* = Less than $500 million.

(09/03/03)

Comparison of Possible Budgetary Treatments of the KC-767A Tanker Acquisition

By Fiscal Year, in Billions of Dollars

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Treatment of the Tanker Financing Plan as a Lease-Purchase															
Budget Authority	3.2	3.3	3.4	3.6	3.7	0.2	0.3	0.4	0.6	0.7	0.7	0.6	0.5	0.3	21.5
Outlays	0.2	1.0	2.3	3.2	3.5	3.7	2.9	1.3	0.6	0.7	0.7	0.6	0.5	0.3	21.5
Treatment of the Tanker Financing Plan as an Operating Lease															
Budget Authority	0	0	0.1	0.5	1.0	1.6	2.1	2.7	2.9	3.0	2.7	2.2	1.6	1.1	21.5
Outlays	0	0	0.1	0.5	1.0	1.6	2.1	2.7	2.9	3.0	2.7	2.2	1.6	1.1	21.5
Direct Purchase of Tankers															
Budget Authority	1.4	2.5	3.0	3.0	3.0	3.0	0	0	0	0	0	0	0	0	15.9
Outlays	0.5	1.3	2.1	2.8	3.0	2.9	2.2	0.9	0.1	0.1	0	0	0	0	15.9

(09/03/03)

As we have also discussed at some length, when you have different flows of money over time, it is useful to do a present-value calculation to try to capture the differences in the timing of payments. Our estimate of the difference in cost is between $1 billion and $2 billion, or 10 to 15 percent, depending on exactly what assumptions are used.

The administration or the Air Force had talked about a $150 million difference. The biggest difference between our estimate and theirs is the difference in the assumptions about what a direct purchase would look like. We assumed that if Congress was willing to engage in this leasing agreement, it also ought to be willing to provide the kind of multiyear procurement authority that has sometimes been exercised for some weapons systems.

The Air Force in calculating its present value added 7.4 percent to the cost of the aircraft under the assumption that that kind of multiyear procurement authority would not be available. That accounts for close to $1 billion of the difference between our estimate and theirs.

If you were to compare this leasing arrangement with a purchase assuming multiyear procurement authority, even under the administration's numbers you would get a number in the vicinity of $1 billion or a little bit more. There are other differences, but that looks to me to be the major difference between those two sets of numbers.

Why is it more costly? It is more costly because, instead of borrowing at Treasury rates, which are the lowest possible rates, the government via the trust will be borrowing at higher rates. The Air Force estimates some of the borrowing at 50 to 100 basis points above Treasury rates but expects that some will be at junk bond

rates, hundreds of basis points above Treasuries. The government will have to bear those costs through its lease payments.

Finally, we have a broader concern, namely, how this transaction and others like it could affect the government's overall budget process. Federal budgeting is generally based on the principle that spending decisions are best made if the full costs of the programs and commitments are recognized explicitly up front when the spending decisions are being made. Through its budget resolution, Congress specifies the amount of discretionary budget authority and outlays for each year and then goes through a very painful process of allocating those funds among competing national needs and priorities.

When an agency of the government enters into transactions that involve significant obligations of the government but that are not fully reflected in the budget figures, those figures become less meaningful, and making trade-offs on a level playing field among competing demands for scarce resources becomes more difficult. Programs with a special non-budgetary treatment have a clear advantage over other programs in obtaining funding, regardless of their relative merits.

We at CBO cannot predict how much budget authority will be available over the next few years and how much of that will be for defense procurement. We cannot judge how easy or hard it would be to allocate through the regular appropriations process sufficient funds to make a straightforward purchase of the new tanker aircraft, either by drawing upon funds that would have been used for other purposes or by simply adding to the total pot of money. You are in a much better position than we are to make that judgment.

The key question, it seems to me, is whether the Air Force needs to acquire these aircraft as quickly as it proposes and, if so, whether the proposed transaction is the best way to do so. If it is determined that the aircraft need to be acquired and if it is possible to find the funds to finance a straightforward purchase, the taxpayers would save some money and the budget process would be more meaningful and effective.

Thank you, Mr. Chairman. I will be happy to answer any questions.

[The prepared statement of Mr. Sunshine follows:]

Prepared Statement by Robert A. Sunshine

SUMMARY

The Department of Defense Appropriations Act, 2002 (Public Law 107–117), authorized the Air Force to pursue a pilot program for leasing as many as 100 Boeing 767 aircraft for up to 10 years and directed the service to describe its plan to Congress before entering into such a lease. The Air Force, Boeing, the Office of the Secretary of Defense, and the Office of Management and Budget (OMB) reached an agreement in May 2003 for the service to acquire 100 Boeing KC–767A aerial refueling aircraft through a complex financing arrangement. The Air Force submitted the required report to Congress on July 11, 2003. In that report, the Air Force concludes that the proposed leasing arrangement meets all requirements of the Department of Defense Appropriations Act, 2002, which specified that the terms had to be consistent with the criteria for an operating lease as defined in OMB Circular A–11, *Preparation, Submission, and Execution of the Budget.* The report further concludes that, while leasing would cost about $150 million more (expressed in net present value terms) than an outright purchase, leasing is the preferred approach because of the "advantage it affords for quickly delivering needed tankers to our warfighters without requiring significant up-front funding."

After analyzing the Air Force's report and receiving additional information about the proposed lease from the Air Force and Boeing, the Congressional Budget Office (CBO) has concluded that the transaction would essentially be a purchase of the tankers by the Federal Government but at a cost greater than would be incurred under the normal appropriation and procurement process. The special-purpose entity that has been established to buy the aircraft would, in fact, be substantially controlled by and act on behalf of the Federal Government, and its transactions should be reflected in the Federal budget.

Even if one were to view the arrangement as a lease, CBO's analysis indicates that the proposal does not meet the conditions for an operating lease described in the *Congressional Scorekeeping Guidelines* and in OMB Circular A–11 and thus does not comply with the terms of section 8159 of the Department of Defense Appropriations Act, 2002.

Finally, CBO concludes that implementing the Air Force's proposed arrangement would be more expensive than the service has estimated. While the Air Force estimates that its proposal would cost $150 million more than an outright purchase, CBO's analysis indicates that the proposal would cost $1.3 billion to $2 billion more in present-value terms, or 10 percent to 15 percent more than an outright purchase. On average, the Air Force would spend $161 million per plane in 2002 dollars to lease and then purchase the aircraft, compared to a cost of $131 million per plane for an outright purchase.

THE AIR FORCE'S PLAN TO ACQUIRE 100 BOEING TANKERS

The Air Force plans to sign a single multiyear contract that will include leasing 100 KC–767A aerial refueling aircraft from a special-purpose entity, called the KC–767A USAF Tanker Statutory Trust 2003–1 (the Trust). The tankers will be delivered to the Air Force in six groups—four aircraft in 2006, 16 aircraft in 2007, and 20 planes annually over the 2008–2011 period. The Air Force will use each aircraft for 6 years and pay the Trust an average of $126 million a plane, in 2002 dollars, during that period. At the conclusion of each 6-year period, the Air Force can return the aircraft to the Trust or purchase them for a price to be set when the contract is signed. The Air Force currently estimates the purchase price at an average of $35 million per plane in 2002 dollars. Thus, according to its estimate, the Air Force will pay an average of $161 million per plane to lease and then purchase the tankers.[1] The Air Force has not negotiated to purchase the planes directly, but on the basis of the leasing arrangement, CBO estimates that given multiyear procurement authority, the service could negotiate a contract for 100 tankers at an average price of $131 million per plane in 2002 dollars.

The Air Force will be able to terminate the deal prior to the completion of the contract by notifying the Trust one year in advance. However, that termination would be costly because the Air Force would have to make an additional payment equal to an annual lease payment on each aircraft and would have to reimburse the Trust for any additional costs that resulted from the decision to terminate.

FINANCING ARRANGEMENTS FOR THE PROPOSAL

Boeing and the Air Force have established the special-purpose entity to execute the leasing arrangement and to finance the acquisition of the aircraft. Under the financing plan established by the Air Force and Boeing, the Trust will buy 100 KC–767A tankers from Boeing at an estimated average price of $131 million per aircraft (in 2002 dollars) and will borrow money to make progress payments to Boeing during the construction period for each group of aircraft.

As Boeing completes construction of each group of tanker aircraft, the Trust will issue bonds in the commercial bond market. Boeing and the Air Force estimate that the proceeds from the bonds will need to equal $138.4 million per aircraft (in 2002 dollars), enough to pay Boeing for the remainder that it is owed for the aircraft, repay the principal on the construction loans, and pay interest on the construction loans, which the Air Force estimates at an average of $7.4 million per aircraft.

Press reports indicate that there will be three classes of bonds. The Trust, which will technically own the aircraft, will use the Air Force's annual lease payments to pay principal and interest on two of the three classes of bonds. If the aircraft are sold at the end of the lease term, the proceeds will be used to pay off principal and interest on the last class of bonds. The price the Air Force may pay to acquire title to the tankers will be established for all 100 planes at the time the contract is

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[1] Payments under the Air Force's proposal are based on a negotiated purchase price of $131 million in 2002 dollars. Payments will be adjusted for inflation using a combination of the Employment Cost Index and the Industrial Commodities Index.

awarded. That amount will be equal to the principal and interest owed on the third class of bonds. Under the terms of the agreement, if the Air Force should choose to forgo purchasing the aircraft and the aircraft are then sold to another purchaser for more than the amount owed on the bonds, any profits from the sale will be returned to the U.S. Treasury.

According to the Air Force and Boeing, the credit rating on the bonds will be based on the strength of the cash flow from the Air Force, rather than on Boeing's credit rating. For that reason, the Air Force expects that the Trust will be able to issue bonds at interest rates that are only slightly greater than Treasury rates. Interest rates on the bonds must compensate investors for the risk that the Air Force might terminate the contract early or might decline to purchase the aircraft at the end of the lease. CBO believes that the small risk premium estimated by the Air Force on borrowing by the special-purpose entity indicates that the Air Force assumes the market will perceive the debt as being backed by the Federal Government. (See Figure 1 for a graphic display of the financing arrangements.)

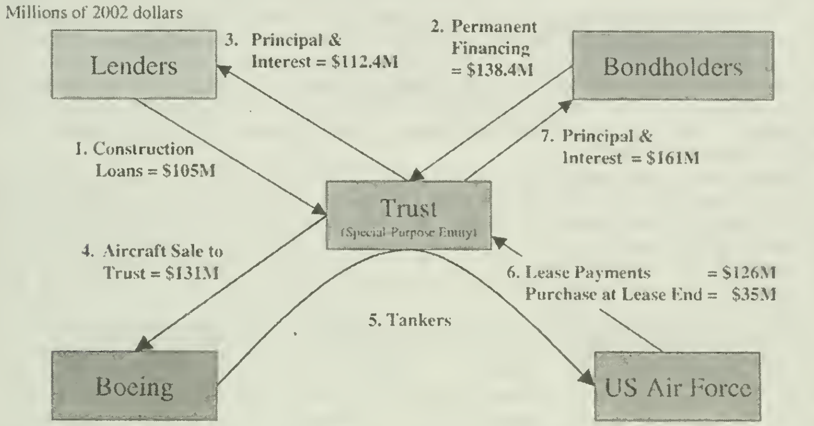
THE RESULTS OF CBO'S ANALYSIS

CBO reviewed the information contained in the Air Force report, sections of the proposed contract, and the economic analysis prepared to support the Air Force's decision to lease. CBO found that the financing plan envisioned for acquiring the tankers constitutes Federal borrowing and spending under standard government accounting principles.[2] CBO also concludes that the proposal does not meet the conditions for an operating lease described in OMB Circular A–11 and thus does not comply with the terms of section 8159 of the Department of Defense Appropriations Act, 2002. While the Air Force acknowledges that acquiring the aircraft with this financing method is more expensive than purchasing them outright, its estimate of the extra cost—at $150 million—is much less than CBO's analysis indicates. CBO concludes that the Air Force would pay $1.3 billion to $2 billion (expressed in net present value terms) more to lease and then purchase the tankers than it would to purchase them outright.

[2] The 1967 *Report of the President's Commission on Budget Concepts* suggests a broad definition of Federal budget activities, with a few narrow exclusions. It observes that "providing for national security . . . obviously constitutes activities of the Federal Government which should clearly be in the budget." Consistent with other recommendations by the Commission, CBO believes that when the government owns a significant part of an entity's assets or exercises substantial control over the entity's operations, that entity should be included in the Federal budget.

Figure 1

Costs Per Aircraft Under the Tanker Financing Plan



1. As Boeing builds the tankers, the Trust will borrow money from commercial banks to make progress payments to Boeing. CBO estimates that, on average, the Trust will borrow approximately $105 million per plane for progress payments.

2. Shortly before the planes are delivered, the Trust will issue bonds to raise $138.4 million per plane in permanent financing.

3. The Trust will use the bond proceeds to pay principal and interest on the construction financing loans, which CBO estimates will average $112.4 million per plane.

4. The Trust will use the rest of the bond proceeds to pay Boeing the remainder it is owed on the aircraft. Total payments to Boeing will equal $131 million per plane.

5. Boeing will transfer title to the planes to the Trust and deliver the aircraft to the Air Force.

6. The Air Force will make lease payments totaling $126 million per plane and a final payment of $35 million should it choose to purchase the planes at the end of the lease.

7. The Trust will use the Air Force's lease and purchase payments to remit $161 million in principal and interest to the bondholders.

SOURCE: Congressional Budget Office.

The Tanker Financing Plan Constitutes Federal Borrowing and Spending

In its report to Congress, the Air Force indicates that the administration will record the tanker contract as an operating lease in the Federal budget once the contract is signed. Consequently, obligations and outlays will be recorded on a year-by-year basis, reflecting the lease payments due each year to the Trust. CBO believes that recording the transaction as such would be at odds with standard government accounting principles because the proposed financing constitutes Federal borrowing and spending. Therefore, the borrowing, resulting aircraft purchases, and

interest payments by the special-purpose entity established specifically for this purpose should be recorded in the budget at the time the Trust makes those transactions.

The proposed contract between Boeing and the Air Force, as well as the financing arrangement, clearly indicates that the KC–767A USAF Tanker Statutory Trust 2003–1 exists solely to borrow money on behalf of the Federal Government to allow the Air Force to acquire an asset that has been built to its unique specifications. The borrowing activities of the special-purpose entity will be directed by a financing committee composed of the Air Force, Boeing, and the lease administrator. (The Air Force has asked Boeing to serve as the lease administrator.) Under the operating guidelines for the financing committee, the Air Force must approve all of the terms and conditions for the financing plan and must review and approve all financing documents.[3] CBO concludes that the actions of that committee will be explicitly controlled by the Air Force.

Because the government will both direct and benefit from the Trust's financing activities (see Figure 2), the Trust will be acting on behalf of the government. Therefore, its borrowing and spending should be treated as Federal borrowing and spending and recorded appropriately in the budget.[4] The parties to the lease portion of the contract are the Air Force and the Trust. Since the Trust is an instrument of the government, the government will effectively be buying the aircraft (via the Trust) and then leasing them to itself. To accurately reflect the nature of that arrangement, the Federal budget should report the transactions between the Trust and Boeing, and between the Trust and its bondholders, not the essentially intragovernmental transfers between the Trust and the Air Force. Thus, when the Trust pays Boeing for the aircraft, those payments should be reflected as Federal outlays. Subsequent interest payments on the Trust's borrowing should also be reflected as outlays when those payments are made. (Federal borrowing is not counted as a governmental receipt, and the repayment of principal is not counted as an outlay.)

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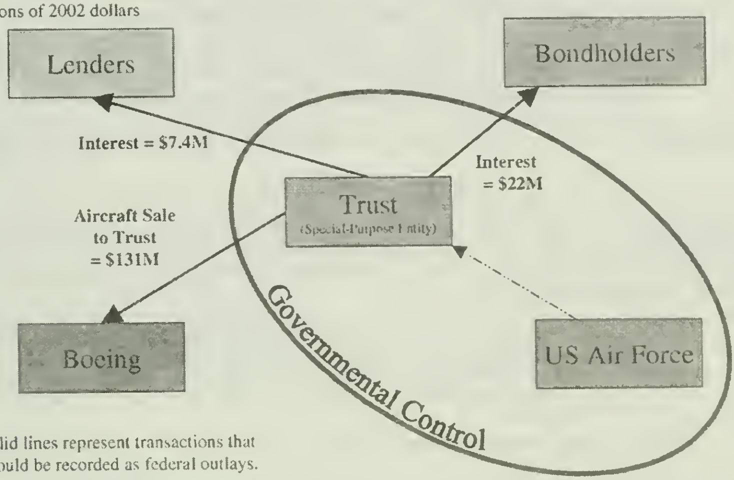
[3] Boeing provided CBO with a summary of the operating guidelines for the financing committee. It is available upon request.

[4] The Universal Service Fund is another example of a Federal program administered by a private agency for the Federal Government. The Universal Service Access Company (USAC), an independent organization that is regulated by the Federal Communications Commission, collects "contributions" from telecommunications service providers and makes payments to other service providers to ensure universal access to telecommunications services. Even though the collections and disbursements are not handled by the Treasury, USAC's transactions are included in the Federal budget. In 2002, the agent recorded revenue collections of $5.5 billion and expenditures of $5.1 billion in the Federal budget.

Figure 2

Federal Outlays Per Aircraft Under the Tanker Financing Plan

Millions of 2002 dollars



Solid lines represent transactions that should be recorded as federal outlays.

SOURCE: Congressional Budget Office.

Table 1 displays how that budget authority and the associated outlays should be recorded in the budget compared with how CBO believes the department might reflect the contract in the budget. The table also shows CBO's estimate of the cost to purchase the tankers directly using traditional procurement methods. For budget purposes, all amounts are shown in current dollars.

The two budgetary treatments of the financing plan differ substantially. If the proposed transaction is recorded as a purchase, budget authority over the first 5 years would total $17.3 billion, and outlays would sum to $10.1 billion. If the transaction is recorded as an operating lease, only $1.5 billion in budget authority would be shown over the first 5 years, and outlays during that period would also total only $1.5 billion, because most of the aircraft would not be available for leasing until 2009.

TABLE 1. COMPARISON OF POSSIBLE BUDGETARY TREATMENTS OF THE KC-767A TANKER ACQUISITION

	By Fiscal Year, in Billions of Dollars														
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
TREATMENT OF THE TANKER FINANCING PLAN AS A LEASE-PURCHASE[a]															
Estimated Budget Authority	3.2	3.3	3.4	3.6	3.7	0.2	0.3	0.4	0.6	0.7	0.7	0.6	0.5	0.3	21.5
Estimated Outlays	0.2	1.0	2.3	3.2	3.5	3.7	2.9	1.3	0.6	0.7	0.7	0.6	0.5	0.3	21.5
TREATMENT OF THE TANKER FINANCING PLAN AS AN OPERATING LEASE															
Estimated Budget Authority	0	0	0.1	0.5	1.0	1.6	2.1	2.7	2.9	3.0	2.7	2.2	1.6	1.1	21.5
Estimated Outlays	0	0	0.1	0.5	1.0	1.6	2.1	2.7	2.9	3.0	2.7	2.2	1.6	1.1	21.5
DIRECT PURCHASE OF TANKERS[b]															
Estimated Budget Authority	1.4	2.5	3.0	3.0	3.0	3.0	0	0	0	0	0	0	0	0	15.9
Estimated Outlays	0.5	1.3	2.1	2.8	3.0	2.9	2.2	0.9	0.1	0.1	0	0	0	0	15.9

SOURCE: Congressional Budget Office.

NOTES: In the treatment of the financing plan as a lease-purchase, budget authority reflects the obligation by the Trust to purchase aircraft from Boeing and the obligation to make interest payments to creditors. Outlays reflect payments to Boeing during the time that it takes to construct and deliver the aircraft, as well as interest payments to creditors. In the treatment as a lease, budget authority and outlays equal annual lease payments. In the estimate of a direct purchase, budget authority and outlays reflect estimated costs of a straightforward purchase using the normal appropriation and procurement methods.

The figures do not include funding for operations and support or for military construction projects to house and maintain the new tankers.

a. If the Trust is not considered an instrument of the federal government, the acquisition should be treated as a lease-purchase. Consistent with *Congressional Scorekeeping Guidelines* and OMB Circular A-11, the budgetary treatment would be similar to that of a purchase.

b. The difference in total cost between a direct purchase and either treatment of the financing plan is almost $5.7 billion in current dollars.

In total, by CBO's estimates, acquiring the tankers through a lease would cost $21.5 billion over the next 14 years. In contrast, CBO estimates, a direct purchase of 100 tankers would cost $15.9 billion over the same period—but with all of the outlays recorded by the end of 2011.

Budget authority and outlays for the Air Force's proposed lease have two components: the purchase price of the aircraft and the interest costs from the financing arrangement. (Those costs include the additional expense of borrowing money at rates that exceed Treasury's normal borrowing rates.) If the Air Force's proposal is recorded in the budget as a purchase, the purchase price of the aircraft would appear in the first few years when the planes were being constructed, and interest would be recorded annually as the lease payments were made. Of the $21.5 billion shown in Table 1, $17.1 billion is for the purchase price of the aircraft, while budget authority for the imputed interest would total $4 billion over the 2006–2017 period. The remaining $0.4 billion would pay for insurance and other lease costs. Outlays for the purchase price, which would occur over the 2004–2011 period, would reflect progress payments during the construction period and final payments when the planes were delivered. Outlays for imputed interest charges would coincide with lease payments and would equal the annual budget authority for those charges.

Alternatively, if one chooses not to view the special-purpose entity as an instrument of the government, CBO concludes the arrangement should be reflected in the budget as a lease-purchase, not an operating lease as suggested by the Air Force and Boeing. In that case, the budgetary treatment would be similar to that of the financing plan treated as a purchase (shown in Table 1).[5]

The Proposal Does Not Meet the Criteria for an Operating Lease

After reviewing the details of the proposal, CBO concludes that it does not meet the conditions for an operating lease described in OMB Circular A–11 and thus does

[5] For a more in-depth discussion, see Congressional Budget Office, *The Budgetary Treatment of Leases and Public/Private Ventures* (February 2003).

not comply with the terms of section 8159 of the Department of Defense Appropriations Act, 2002.

To comply with section 8159 and to be treated as an operating lease in the budget, the lease must meet the following six criteria:

- The asset must be a general-purpose asset, not built to unique government specifications.
- There must be a private-sector market for the asset.
- The present value of the lease payments cannot exceed 90 percent of the asset's fair market value at the start of the lease.
- The lease cannot contain a bargain-price purchase option.
- Ownership of the asset must remain with the lessor.
- The lease term cannot exceed 75 percent of the asset's useful life.

CBO has concluded that the arrangement between Boeing and the Air Force fails to meet the first four of these criteria and complies with the letter but not the spirit of the fifth.

The Lease Must Be For a General-Purpose Asset. Operating leases must be for a general-purpose asset, not one that is built to the unique specifications of the government. An aerial refueling tanker is not a general-purpose asset. Although the tanker is based on Boeing's commercial 767–200 model, the Air Force has specified several significant modifications such as auxiliary fuel tanks, a refueling boom, a refueling receptacle, more powerful generators, and heavier wiring to accommodate unique military requirements. The tanker's aerial refueling capability serves a uniquely governmental purpose.

There Must Be a Private-Sector Market. A private-sector market must exist for any asset obtained through an operating lease. The Air Force and Boeing assert that the lease meets this criterion because Boeing has offered the tanker, called the Global Tanking and Transport Aircraft (GTTA), for public sale. However, the only customers for the GTTA so far are the U.S. Air Force, the government of Japan, and the government of Italy, all of which plan to use the aircraft to refuel their military aircraft. Boeing states that there are a number of private companies that might purchase GTTA aircraft—Omega Air and the Tanker and Transport Service Company Ltd., in particular. CBO does not believe that those companies would buy more than a few of the tankers.

Boeing also points out that some long-haul commercial air carriers may be interested in acquiring the capability for aerial refueling, but none currently employs the technique. CBO believes it unlikely that aerial refueling would make economic sense for commercial transportation companies because they already have access to groundbased refueling services at airfields worldwide. Finally, while Boeing cites many potential customers for the freighter capability inherent in the tanker, how many of the 100 tankers reconfigured as freighters the private market would be able to absorb is unclear.

There are only about two dozen outstanding orders for all Boeing 767 variants. The KC–767A is derived from the Boeing 767–200C variant, for which Boeing has no commercial orders. In fact, according to Boeing, the last delivery of any commercial version of 767–200 aircraft occurred in 2002, and Boeing has no future orders because it now produces 767 models that are superior to the 767–200. Thus, while there may be a private-sector market for a few of the aircraft that the government is acquiring, there is no evidence of such a market for 100 tanker aircraft.

Lease Payments May Not Exceed 90 Percent of the Fair Market Value. To qualify as an operating lease, the net present value of the lease payments may not exceed 90 percent of the fair market value of the aircraft. The Air Force report indicates that the lease payments under the proposed financing arrangement will account for 89.9 percent of the fair market value of the aircraft, which the Air Force calculates at $138.4 million (in 2002 dollars) when the cost of the construction loan financing ($7.4 million per aircraft) is included. CBO believes that including the cost of that financing as part of the aircraft's fair market value is inappropriate because that cost is additional to any interest that would be capitalized in the price of the aircraft in the purchase option. When the financing cost is excluded from the calculation, the net present value of the lease payments accounts for 93 percent of the fair market value.

CBO also notes that, even using the Air Force's methodology, there is a significant possibility that the threshold of 90 percent of the fair market value could be exceeded for at least some of the groups of leased tankers. The lease payments are based on the Air Force's estimate of bond interest rates. If the rates for Treasury bonds are higher than the predicted value used by the Air Force, or if the spread on the interest rates for the bonds issued by the Trust is greater than predicted, lease payments will increase accordingly. Since the Air Force already estimates that the

present value of the lease payments will be 89.9 percent of the fair market value, it has no margin for error on its estimate of interest rates.

The Lease Cannot Contain a Bargain-Price Purchase Option. The lease cannot contain an option to purchase the aircraft at a bargain price. The agreement gives the Air Force the option to purchase the aircraft at any time during or at the end of the lease. The Air Force estimates that it could purchase the aircraft at the end of the lease for an average $35 million apiece (in 2002 dollars), or 28 percent of the cost to purchase new tankers. Since the aircraft should last at least 30 years, the aircraft should have 80 percent or more of their life expectancy remaining after 6 years. While it is difficult to establish the fair market value of used tanker aircraft, CBO believes that paying 28 percent of the cost of a new tanker for a used aircraft with 80 percent of its life left constitutes a bargain purchase price.

Ownership Must Remain With the Lessor. Under the operating lease, ownership must remain with the lessor, and title may not transfer to the government at or shortly after the end of the lease term. CBO believes the Trust is an instrument of the government, given the level of control the government exercises over its operations. Thus, the Trust is effectively purchasing the tankers for the government.

However, if one chooses not to view the Trust as an instrument of the government, the financing arrangement technically complies with this criterion since the purchase option is contingent upon subsequent authorization and appropriation by Congress. It seems clear for several reasons, however, that the Air Force fully intends to acquire the tankers during or at the end of the lease term.

First, the Air Force and Boeing plan to negotiate a purchase price for each group of planes when the contract is awarded. The Air Force has the right of first refusal on the disposal of the aircraft at the end of the 6-year term. The Air Force has also stated its intention to earmark funds to purchase the aircraft.

Second, senior Department of Defense officials have stated on several occasions that the department has a long-term requirement for tankers and that the department plans to replace the entire fleet of KC–135 aircraft over the next 30 years. It seems implausible that the Air Force would return the 100 leased tankers to the Trust since the Air Force plans to retire 68 KC–135E tanker aircraft over the 2004–2006 period regardless of whether the lease is approved and will retire all 131 KC–135E aircraft by 2008 if the lease is approved. Moreover, it would have to accept a significant reduction in its aerial refueling capability if it chose not to purchase (or continue to lease) the KC–767 tankers at the end of the 6-year term.

Finally, the Air Force's basing plan for the tankers includes more than $600 million in construction projects to support the permanent basing of the aircraft. Spending those funds would be uneconomical if the Air Force was seriously considering returning the aircraft at the end of the lease term.

The Proposed Financing Approach Is More Costly Than an Outright Purchase

The proposed financing arrangement to acquire the tanker aircraft is significantly more expensive than an outright purchase by the government because of the anticipated interest rates (which are higher than U.S. Treasury rates) and other costs that are unique to the leasing option. By CBO's estimates, total costs for a direct purchase, including the estimated costs for self-insurance, would be about $16 billion (see Table 2). The Air Force reports that it will pay $17 billion to lease the aircraft for 6 years and more than $4 billion to purchase them at the end of the lease term. Those payments include the interest expense on borrowing by the special-purpose entity. The Air Force will also pay about $400 million for insurance and other expenses related to the lease transactions. Thus, the Air Force estimates that the costs of acquiring the aircraft under the financing arrangement will total almost $22 billion in current dollars. On a present value basis, the leasing approach would cost $1.3 billion more than an outright purchase, CBO estimates. (The administration uses a discounting methodology specified in OMB Circular A–94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs,* which, CBO estimates, would result in a greater cost difference of $2 billion relative to a purchase.)

TABLE 2. COMPARISON OF COSTS BETWEEN A DIRECT PURCHASE AND THE AIR FORCE'S PROPOSAL (Billions of Dollars)

DIRECT PURCHASE		AIR FORCE'S PROPOSAL	
Procurement Costs	14.9	Lease Payments	16.6
Nonrecurring Engineering Costs	0.6	Purchase at End of Lease	4.4
Insurance[a]	0.4	Insurance	0.4
		Other Lease Costs	*
Total	15.9	Total	21.5
Present Value	**13.6**	**Present Value**	**14.9**

SOURCE: Congressional Budget Office.

NOTE: * = Less than $500 million.

a. If the Air Force were to purchase tankers directly, it would "self-insure." The value of insurance is shown here to make the total cost of the "direct purchase" option comparable to the Air Force's proposal.

The Air Force's Economic Analysis Understates the Cost Difference

In its report to Congress, the Air Force indicates that leasing 100 air-refueling aircraft will cost $150 million more than an outright purchase in net present value terms (see Table 3). CBO's analysis indicates that the estimate significantly understates the additional cost associated with the Air Force's plan. The Air Force, in fact, does not rule out that possibility, stating that "had Congress chosen instead to provide multiyear procurement authority and had the Department of Defense been able to accommodate that execution while preserving program stability, the [net present value] could favor purchase by up to $1.9 billion."[6] The Air Force's report notes that this type of analysis is "highly sensitive to the underlying assumptions" but that "in no case approved by OMB did the financial analysis indicate that the net present value of the lease option as being less than that of a traditional purchase."

[6] The Air Force appears to attribute the large difference to the effects of multiyear procurement alone. In fact, CBO's analysis indicates that the assumption of multiyear procurement accounts for only $970 million of the $1.9 billion difference.

TABLE 3. MAJOR DIFFERENCES BETWEEN CBO'S ESTIMATE AND THE AIR FORCE'S ESTIMATE OF THE ADDED COST FOR LEASING VERSUS PURCHASING KC-767A TANKERS
(In millions of dollars)

	Additional Cost of Leasing (Net Present Value)
Air Force's Estimate	150
Impact of Changing Assumptions:	
Multiyear Procurement Savings in Purchase Price	+970
Proper Inflation of Progress Payments	+640
Compression of Progress Payments	+210
Discount Rate and Interactions Among the Above Factors	-650
CBO's Estimate	1,320

SOURCE: Congressional Budget Office.

Multiyear Procurement. For the lease, the Air Force and Boeing negotiated a price for the aircraft as delivered to the Trust on the basis of the assumption that the Air Force would ultimately lease and acquire 100 airplanes. That assumption allows Boeing to make investments in facilities and equipment that will reduce the total costs of production. It also allows Boeing to purchase parts and components in large quantities to get price breaks from suppliers. For its analysis of the purchase option, however, the Air Force assumed that each lot of aircraft would be bought on an annual basis (that is, with no assurances of subsequent purchases). Thus, no price breaks or production efficiencies were included in the estimated purchase prices.

For the purchase option, the Air Force increased the price of each aircraft by 7.4 percent relative to the price that it used for the lease. CBO believes that estimating the purchase cost under the assumption that a multiyear contract would be granted is warranted because, under section 8159, Congress has already granted authority for the lease and would likely grant such authority for an acquisition program of that size. The Air Force's statement that it did not assume a multiyear procurement in its analysis of a purchase because it did not currently have that authority is inconsistent with its budgetary practices for other major acquisition programs. The department does not currently have multiyear procurement authority for either the F–22 fighter or the Joint Strike Fighter programs but assumes multiyear procurement in estimating the future purchase costs of those aircraft.

CBO estimates that the cost to acquire 100 KC–767A tankers under the proposed financing arrangement would exceed the cost of purchasing the aircraft under a multiyear contract by $1.1 billion (expressed in net present value terms), an increase of $970 million relative to the Air Force's results. Although Congress has already granted multiyear authority for the lease, in traditional procurement programs, that authority is frequently provided after several years of production prove that the program is stable. If Congress waited until the third lot to grant the authority, then, by CBO's estimates, the lease would cost $920 million more than the purchase, an increase of $765 million relative to the Air Force's estimate.

Inflation of Progress Payments. The Air Force's method for applying inflation to progress payments is another factor that affects the purchase price in its analysis. During the construction period, a contractor is continually paying for materials and labor. If the government paid the contractor for the full price of the asset at the time of delivery, the contractor would have to borrow money to cover those expenses and include the full costs of that borrowing in the purchase price. Progress payments reimburse the contractor for the costs the company incurs during the construction period and reduce the requirement for the contractor to borrow the money to cover expenses—resulting in a lower purchase price for the government. The gov-

ernment usually limits progress payments to a percentage of the actual costs incurred at the time the request for payment is made.

In its analysis of the cost of a straightforward purchase, the Air Force estimated progress payments as a percentage of the tanker's price, which it inflated to the year of delivery. CBO believes that that method overstates both the amount of the progress payments and the total cost of the aircraft since inflation would affect the cost of material and labor only up to the time those costs were paid. The method also conflicts with the DOD Comptroller's guidance on inflation, which calls for inflating costs to the year the order is made, using an inflation index that takes into account the fact that outlays will occur incrementally between the date the order is placed and the date the asset is delivered. CBO estimates that if the cost of progress payments were inflated only to the time those costs were paid, then the cost of the leasing arrangement would exceed the cost of a straightforward purchase by an additional $640 million (in net present value terms).

Schedule for Progress Payments. The schedule for making those progress payments is also a factor that affects the purchase price in the Air Force's analysis. For the option of purchasing the aircraft, the Air Force assumed that progress payments would begin approximately 4 years before the aircraft were delivered. The assumed payment schedule seems protracted for several reasons. First, the schedule is longer than that of other major aircraft procurement programs. For example, the budget for the C–17 transport program provides advance procurement funding just 2 years before the delivery date. Other procurement programs, like that for the F–22 fighter, assume that the majority of the progress payments are made over 3 years.

Second, the Air Force's aircraft procurement programs spend, on average, about 90 percent of budget authority within 3 years after appropriation. In contrast, the progress-payment schedule that the Air Force used in calculating the costs of purchasing tankers would expend only 75 percent of budget authority in 3 years, with the last 25 percent of the payments in the fourth year. That progress-payment schedule does not appear to reflect the Air Force and Boeing's plan to deliver the first KC–767A tanker approximately 34 months after lease approval and to deliver subsequent aircraft on an even faster schedule.

Using a 4-year progress payment schedule increases the cost of the purchase option in net present value terms because it brings forward a large portion of the payments into a period in which the discount factors have less impact. The method appears to conflict with the Department of Defense's Financial Management Regulation, which limits progress payments to a percentage of incurred costs, because it would make payments before work commences. Using a 3-year schedule for progress payments (one more in line with historical outlay rates for procuring aircraft) would defer some payments for 1 year relative to the schedule used in the Air Force analysis and would reduce the cost of the purchase by about $210 million in net present value terms.

Discount Rates and Interaction Among The Factors. The results of any economic analysis are sensitive to changes in the discount rate selected. Changes in the discount rate also affect the costs associated with assumptions made about multiyear procurement and progress payments. CBO has calculated the present value of cash flows associated with the planned acquisition of tanker aircraft by discounting the estimated cash flow for each year using the interest rate on a marketable zero-coupon Treasury security with the same maturity from the date of disbursement as that cash flow. That method—often referred to as the "basket of zeros" discounting approach—is used by both CBO and OMB for calculating estimates of loan subsidies under the Federal Credit Reform Act. Although the tanker acquisition plan does not explicitly involve a direct loan or Federal loan guarantee, the financing of tankers would result in a series of annual cash flows that have to be matched by the trust's borrowing (on behalf of the government). Using the basket of zeros to discount that stream of cash flows most accurately reflects the time value of money. Under CBO's approach, the acquisition plan would cost about $1.3 billion more—in present value terms—than an outright purchase would.

In contrast, the Air Force's analysis relied on the simplified discounting method provided in OMB Circular A–94, which advises using a single discount rate (as opposed to the "basket of zeros"). In implementing the guidelines, the Air Force used a 9-year Treasury rate, based on a 3-year construction period and a 6-year lease term, to discount the lease payments. CBO estimates that this assumption would result in an additional cost to leasing of $1.7 billion.

However, CBO believes that if a single discount rate is used, the relevant period of analysis should be 6 years, since the Trust will issue bonds that mature in no more than 6 years. CBO estimates that using the administration's method with a

single 6-year discount rate would yield an even larger present value difference—a greater cost of about $2 billion for the Air Force's plan.

OTHER CONSIDERATIONS

Termination Liability

Under the terms of the agreement, the Air Force can terminate the lease prior to the completion of the lease term for its convenience. However, exercising that option would be expensive for the Air Force because of the requirement to pay penalty payments, unamortized costs of the development of the tankers, and additional costs that would arise from its decision to terminate. If it terminates the lease, the Air Force might take delivery of the tankers under construction, make 1 year's lease payment, and within a year, return them to the Trust along with the penalty payment. Alternatively, it might choose to pay Boeing for the costs of work performed before the decision to terminate. CBO estimates that termination liability could be as high as $5 billion to $7 billion in some years. Under the authority in section 8117 of the Department of Defense Appropriations Act, 2003, the Air Force does not intend to set aside budget authority to cover this contingency and therefore would need an appropriation from Congress to do so. Given the potential size of the liability and the fact that the Air Force does not intend to budget for it, CBO believes it is extremely unlikely that the Air Force will terminate the lease.

The Long-Term Affordability of Leasing and Then Purchasing Tankers

The Air Force states that its primary reason for choosing this financing arrangement is the favorable budgetary treatment that it will receive. This treatment would allow the service to get the tankers today without displacing other programs from its budget. However, the budget will eventually have to reflect the Air Force's decision to acquire the tankers. When those obligations are eventually recorded, mostly over the 2008–2017 period, they will create additional budgetary pressure in those years.

The Air Force report acknowledges that the lease is a more costly method to acquire the tankers, but the Air Force believes that its decision to pursue the method is justified by lower up-front costs. Total costs to the government are higher under the lease (almost $5.7 billion in current dollars, according to CBO's estimate), however, so rather than eliminating difficult budgetary decisions, the lease merely postpones them.

There is no reason to believe that the Air Force itself will have more budgetary flexibility 10 years from now than it has today. In 2012, for example, the Air Force will be making lease payments on the tankers that were delivered over the 2007–2011 period—about $2.9 billion (in current dollars) a year in payments. It will also have to begin purchasing the leased tankers at an estimated cost of $4.4 billion over the 2012–2017 period. Finally, the Air Force will have to decide how to replace the rest of its KC–135 fleet. Should the Air Force choose to buy more than 100 KC–767s, it would need to start purchasing those additional tankers in 2011 to keep the Boeing 767–200 production line in operation. Procuring 20 tankers annually would cost about $3 billion each year in current dollars, CBO estimates. Designing and building a new tanker would probably cost more and taker longer.

But the Air Force will not just be buying tankers with its aircraft procurement funds over this period. Other Air Force programs will require significant sums also. According to the administration's published plans and cost estimates, by 2012 the Air Force will be buying 110 Joint Strike Fighters annually at a cost of almost $7 billion per year. Together, those two programs would consume about 70 percent of estimated funding for procuring aircraft. Thus, CBO concludes that the Air Force will likely be faced with making difficult budgetary decisions over the longer term also.

Chairman WARNER. Dr. Nelson.

STATEMENT OF J. RICHARD NELSON, PH.D., ASSISTANT DIRECTOR, COST ANALYSIS AND RESEARCH DIVISION, INSTITUTE FOR DEFENSE ANALYSES

Dr. NELSON. Thank you. Mr. Chairman and members of the committee: I am pleased to come before you today to talk about IDA's estimate for the unit purchase price of the KC–767A tanker/combi aircraft. I will present a summary in the interest of time.

Before beginning, however, and with all due respect to the committee, I need to clarify an impression I was getting from some remarks this morning. I testified for this work, IDA, yesterday and for the record I did not testify for or against the lease, and I do not intend today to testify for or against the lease. I am here to testify on the unit direct purchase price estimate for 100 KC–767A tanker/combi aircraft.

In January 2003 the IDA was tasked by the Office of the Under Secretary of Defense, Acquisition, Technology, and Logistics, and the Office of the Director, Program Analysis and Evaluation, to estimate the unit purchase price for the KC–767A tanker/combi aircraft. The tanker/combi designation which we examined indicates that the aircraft can serve as an air refueling tanker or carry freight or carry passengers or combine freight and passengers, and that is the configuration that we assessed.

The objective of our task was to estimate the unit purchase price for the 100 KC–767A aircraft. We did not investigate the condition of the KC–135E/R fleet or the requirement for a tanker replacement, and we were not asked to evaluate any other aspect of the proposed acquisition nor address provisions of the lease, the financing, suitability of leasing, or any alternatives for that proposal. The unit purchase price for the aircraft is what we addressed and that is what I am prepared to discuss.

Our methodology and data sources are as follows. To estimate the KC–767A tanker/combi purchase price, we separated the acquisition into several segments that included the basic 767–200ER, the enhanced features that the Air Force required from other Boeing 767 family members, the combi modifications for freight and passenger or combined, the auxiliary fuel tank, and the other USAF-unique modifications pertaining to the tanker and the avionics equipment that the Air Force needed. We also looked at the development cost for the program.

The proposed KC–767A program would use FAR Part 12 guidelines written for the acquisition or lease of commercial items. The establishment of a reasonable price under these rules would normally rely largely on prices for the same or similar items in the commercial marketplace. The market for larger tanker aircraft is of course limited and of little value for rigorous determination of reasonable prices under such conditions.

Consequently, while our analysis made use of commercial pricing wherever possible, we relied on traditional cost analysis techniques where estimation by commercial pricing was not practical. Our analysis relied on data from a variety of public sources, some of whom you have heard today, including other sources and the analysis of consultant organizations familiar with the airline industry hired by IDA, internal IDA proprietary data and models, data supplied by Boeing, data provided by other aerospace suppliers who supply to Boeing, and data supplied by the USAF.

Chairman WARNER. We are assuming that you pursued a very careful methodology and that is in your statement. We are quite interested in receiving your conclusions.

Dr. NELSON. We feel the evolution of the task through the time period from January to May is a methodologically conservative approach. We estimate, summarized according to the segments in the

final testimony—there is a table that will show the breakdown. We believe that $120.7 million is a reasonable unit purchase price for the proposed 100 KC–767A aircraft.

[The prepared statement of Dr. Nelson follows:]

PREPARED STATEMENT BY DR. J. RICHARD NELSON

Mr. Chairman and members of the committee, I am pleased to come before you today to talk about IDA's estimate of the purchase price of the KC–767A Tanker/Combi Aircraft.

INTRODUCTION

In January 2003, the Institute for Defense Analyses (IDA) was tasked by the Office of the Under Secretary of Defense Acquisition Technology and Logistics and the Office of the Director, Program Analysis and Evaluation to estimate the purchase price of the KC–767A Tanker/Combi aircraft. The Tanker/Combi designation indicates that the aircraft can serve as an air-refueling tanker or carry freight or carry passengers or combine freight and passengers.

Description of Proposed Aircraft as Assessed by IDA

The KC–767A Tanker/Combi aircraft is to be based upon the commercial B767–200ER. Modifications would include the addition of features available on other Boeing 767 models, as well as changes required for the military application. In the tanker role, total fuel capacity is to be just over 200,000 pounds, including up to 41,000 pounds carried in added auxiliary fuel tanks. The KC–767A would have the capability to perform refueling by both the hose/drogue and boom methods (not simultaneously) from the aircraft centerline and would also be able to receive fuel from other tanker aircraft. The cabin of the KC–767A is to be convertible to three configurations. In the passenger configuration, the KC–767A would accommodate up to 190 passengers and 10 crewmembers. The freight configuration would allow carriage of up to 19 cargo pallets and 10 crewmembers. The combination (so-called "Combi") configuration is to have the capacity for simultaneous carriage up to 10 pallets, 10 crewmembers, and 70 passengers.

OBJECTIVE AND SCOPE OF THE TASK

The objective of the IDA task was to estimate a unit purchase price for 100 KC–767A aircraft. We did not investigate the condition of the KC–135E/R fleet or the requirement for a tanker replacement. We were not asked to evaluate any other aspect of the proposed acquisition and therefore did not address provisions of the lease, financing, suitability of leasing, or any alternatives to this proposal. Consequently, the purchase price for the fleet of KC–767A aircraft is what I am prepared to discuss today.

METHODOLOGY AND DATA SOURCES

To estimate the KC–767A Tanker/Combi purchase price, we separated the acquisition into several segments:

- *Basic 767–200E/R*—the commercial aircraft upon which the KC–767A design would be based.
- *Enhanced B767 Features*—the features from other B767 models that would be added to the basic B767–200E/R design to build toward the KC–767A.
- *Combi Modifications*—the modifications to the B767–200E/R that would allow the carriage of passengers, freight, or both simultaneously.
- *Auxiliary Fuel Tanks*—the lower fuselage fuel tanks, pumps, and installation materials required for additional fuel capacity in the KC–767A.
- *Tanker and Other USAF-Unique Modifications*—the changes required to give the KC–767A its refueling, fuel-receiving, and military-unique capabilities.
- *Development Costs*—the investment required to create and certify the KC–767A design.

The proposed KC–767A program would use FAR Part 12 guidelines written for the acquisition or lease of commercial items. Under these guidelines, the contractor is not required to provide cost estimates, or any other data not normally supplied to commercial customers. The establishment of a reasonable price under these rules would normally rely largely on prices for the same or similar items in the commercial marketplace. However, the KC–767A Tanker/Combi aircraft acquisition involves

modifications that do not easily lend themselves to this approach, particularly in the area of military aerial refueling capability. The market for large tanker aircraft is limited and of little value for rigorous determination of reasonable prices. Consequently, while our analysis made use of commercial pricing wherever possible, we relied on traditional cost analysis techniques where estimation by commercial pricing was not practical.

Our analysis relied on data from a variety of public sources, including other government sources, the analyses of consultant organizations hired by IDA, internal IDA proprietary data and models, data supplied by Boeing, data provided by other aerospace suppliers, and data supplied by the USAF.

TASK RESULTS

The analysis examined the proposed aircraft in detail, and incorporated information provided by Boeing during and after briefings at their facility in Wichita, Kansas. We feel that the evolution of our task through the January to May time period has resulted in a methodologically conservative approach that has produced a high quality unit price estimate. We also performed an internal rate of return (IRR) analysis on an estimate of Boeing's initial investment and found that our price estimate would provide Boeing with an attractive IRR for the time-period, and considering the risks involved. We believe that $120.7 million is a reasonable unit purchase price estimate for the proposed 100 KC–767A aircraft. Our estimate is summarized in the following table according to the segments identified in the methodology.

SUMMARY OF KC–767A TANKER/COMBI PURCHASE PRICE ANALYSIS

[In millions of dollars]

Taxonomy Element	IDA Unit Price Estimate (Fiscal Year 2002)	Primary Analysis Technique	Primary Data Sources
Basic B767–200ER	72.1	Commercial Pricing	Consultants, Department of Transportation data
Enhanced B767–200ER Features	1.6	Commercial Pricing	Consultants, Boeing, USAF data, IDA models, vendor quotes
Combi Modifications	9.5	Commercial Pricing	Consultants, public data
Auxiliary Fuel Tanks	6.3	Cost analysis	Vendor quotes, IDA models
Tanker and Other Modifications	20.3	Cost analysis	IDA models, USAF, Boeing
Development Costs	10.9	Cost analysis	USAF, IDA models
Total	120.7		

Mr. Chairman and members of the committee: Due to the proprietary information agreement that IDA has signed with The Boeing Company, I cannot divulge any proprietary data that we have obtained under this agreement. IDA and the OSD sponsors have provided a redacted version of our report, and the privileged information version can be read in the Pentagon.

Mr. Chairman and members of the committee: Thank you for your attention. I am available for comments/questions.

Chairman WARNER. You said reasonable unit price for purchase.

Dr. NELSON. Yes, sir.

Chairman WARNER. You meant that vice lease. So I mean, you carefully used the word "purchase."

Dr. NELSON. Yes, sir, right.

IDA has executed a proprietary information agreement with Boeing. Boeing has given IDA permission to discuss proprietary information in a closed hearing if needed. IDA and the OSD sponsors have provided a redacted version of our report and the privileged information version can be read in the Pentagon.

Thank you for your attention. I am available for your questions.

Chairman WARNER. Thank you.

We will proceed to questions. First, Dr. Curtin, you said you did not have—I think you made effort, but did not receive—facts to support, "the urgency to proceed along these lines," vice to go through a normal procurement process.

Mr. CURTIN. Yes, sir. We got the same kind of answers that you got from the panel this morning, that, yes, there are corrosion problems and, sure, it is always better to have a shiny new plane than an old one. But the real urgency——

Chairman WARNER. The threat of some block——

Mr. CURTIN. Nothing specific. There is nothing that anybody can say is going to happen.

Chairman WARNER. I made reference to an earlier KC–135 study on which presumably the Air Force relied in its judgment with budget submissions to Congress, and the Secretary said, we just felt it was all wrong. Did you ever look at that analysis?

Mr. CURTIN. Yes, and we have been using that. The Air Force pointed us to that when we first started looking at tankers as a well-documented study, and I was not aware that there is anything more current than that, that had gone into that detail.

Chairman WARNER. In your own professional judgment, was it a carefully prepared study and was it of value?

Mr. CURTIN. It looked to us like a very valuable study, yes, sir. It was a joint study with Boeing and Air Force personnel involved.

Chairman WARNER. That answers my question.

Quickly, Mr. Sunshine, what impact might this transaction, if it is approved by Congress, have on the other military departments in the annual allocation of budgets in those out years where this bow wave is due to occur?

Mr. SUNSHINE. This transaction pushes the need for budgetary resources from the next 2 years out into future years.

Chairman WARNER. That is correct.

Mr. SUNSHINE. So it eases pressures in the next few years.

Chairman WARNER. On one military department.

Mr. SUNSHINE. Or on the whole Defense Department. Congress has to make those tradeoffs.

Chairman WARNER. But each year the Secretary of Defense sits down with the service secretaries, service chiefs, and works through—you know all about it, the Program Objective Memorandum (POM) process, what do you need. Then finally those numbers are struck for the military departments, and by and large service secretaries and service chiefs work within that framework in the Department. It is salute and march off. That is the way that building runs.

But this thing is a very skillful, really a Hail Mary pass, an end run around that process. Then the Air Force is stuck with this thing in the out years, and the Secretary, he cannot just ignore it. Therefore, it seems to me it is going to impinge on that annual allocation between the three military departments. Am I correct?

Mr. SUNSHINE. That is correct, it is a "pay me now or pay me later" or a "pay me something now or pay me more later" proposal.

Chairman WARNER. But I do not see this as a little, narrow Air Force problem, unless the Secretary of Defense said, you are going to have to eat all of this and go into your budget, in which case then there are going to be serious perturbations in other items.

Mr. SUNSHINE. That is correct. CBO recently did an analysis on long-term defense needs, and the pressures are not going to diminish as we get out into those later years.

Chairman WARNER. Let me ask first Mr. Curtin and then the same question to Mr. Sunshine and Dr. Nelson, if you care to opine. I am concerned that if this matter is approved as submitted to this committee and three others it will establish a precedent and we can see a reoccurrence of this type of end run, I call it a Hail Mary pass, around the budget process in the out years.

Having had some modest experience with shipbuilding acquisition, I would love to get a hold of this thing and start building some Navy ships on this program. Believe me, I would throw the all-time Hail Mary that will go over and through the end zone. But there would be an obligation on the people in the military departments: Hey, the Air Force won out; let us give it a try.

Is this wild speculation?

Mr. CURTIN. No, I think you are exactly on point there. The enticing part of this lease is pushing it back to the out years and it is somebody else's problem down the road.

Chairman WARNER. We will have three-star tours in the Pentagon, got the distinguished Pentagon service, go on back to industry. Hey, I have been there, done that.

What do you think, Mr. Sunshine?

Mr. SUNSHINE. I agree. I think it is a very legitimate fear.

Chairman WARNER. Thank you.

Dr. Nelson?

Dr. NELSON. Very definitely there is a difficulty there with long-term implications that are not anywhere near known at this time.

Chairman WARNER. Now, lastly. I assume full responsibility for this, without any adequate consultation with colleagues. But again having some experience with the Department of Defense, and I try, as well as all of the members of this committee and others, to keep abreast of military problems and so forth, we are in a bind, I think, because of—I am not pointing fingers for any reason, but mismanagement, miscalculation, by previous Air Force secretaries or something, not addressing this problem. I will just say that for the record.

What do we do at this juncture? We have three committees of Congress that have approved this. We are the holdouts. As I said, I am very impressed with the thoroughness with which this committee is performing its responsibility. Is there any merit in asking them to come back with a 25 buy to help alleviate the pressures on Boeing——

Senator MCCAIN. A 25 lease.

Chairman WARNER. A 25-unit lease, aircraft unit lease. Then try and require the Department to accept this emergency fix and move into the orderly procurement process. Do you think that has any merit, Mr. Curtin?

Mr. CURTIN. I was intrigued when you raised that earlier, Mr. Chairman.

Chairman WARNER. I am sure there is intrigue in the back halls right now figuring it out.

Mr. CURTIN. Yes, there is, exactly. My sense is that the Air Force and DOD have invested so much time and energy in this lease that they are pretty well focused on that and they are not thinking about alternatives like that. But I think that is probably exactly what is needed, is let us really think through the need and how

urgent it is, what we can do in the short term versus long term, what we can do that is fiscally responsible. I think it is worth a look at it.

The other thing you could do, and I am raising this not as a GAO recommendation, but it is one that we have talked about, is that there is a provision in the lease agreement here that the Air Force can buy these out before the end of the lease. If you feel we need to start on replacing this fleet, you could begin with the lease, get the production line running, and buy yourself some time that way to rejigger the budget over the next couple years, to do the studies they need to do, and you may have only leased the first 20 or 30 at that point and you can make a buy decision at that point. That is another option.

Chairman WARNER. There is only so much we can do, given the constraints of the very short period of time.

Mr. CURTIN. Yes.

Chairman WARNER. But I am concerned when the final questions were propounded here by my colleagues the Secretary of the Air Force said: "We have to figure out that this thing is going to work, if it is mission-capable to the expectations that we have of this aircraft." I am sitting back here saying to myself: Whoa, there is really some front-end work on this thing that either has not been done or could not have been done, and I have to explore that.

So I am just trying to look at something that might take the pressure off Congress, the pressure off the Air Force, to begin to address the needs, and take a 25-unit buy and try it, lease.

Mr. CURTIN. It strikes me that this is really——

Chairman WARNER. Not buy. I said "lease". I am trying to move quickly so I can give you gentlemen time.

Mr. CURTIN. This is a very——

Chairman WARNER. In other words, lease just 25 aircraft.

Mr. CURTIN. It strikes me that this is a very substantial decision and I think the members of the committee have been asking all the right questions. I have the sense that the administration pretty much thought that they had a clear direction to go in a leasing direction and they really did not fully explore the other options for getting the aircraft quickly.

I do not know, I do not have the expertise myself to judge what those other options are. But it seems to me very worthwhile to explore what other options we have for getting either some or all of those aircraft quickly, assuming that there is a need to have them.

Chairman WARNER. It is predicated on the basis, that they desperately need to do this. Lease 25 now and then go into the normal procurement cycle.

Mr. CURTIN. Actually, Mr. Chairman, I do not mean to interrupt you, but that is actually pretty close to a proposal we raised at a hearing earlier this summer with the House Armed Services Committee. We have not explored that in detail, but we did raise the option of just leasing a first portion to buy yourself a few years to do the AOA that should have been done.

So yes. I thought you were talking purchase the first 25——

Chairman WARNER. No, I misspoke in trying to move along quickly.

Mr. CURTIN. Leasing 25, I think that is——

Chairman WARNER. Clearly I said in my initial statement that, let us look at a 25-unit lease program at this juncture.

Mr. CURTIN. I think it makes a lot of sense, yes.

[The information referred to follows:]

September 4, 2003

Honorable Donald H. Rumsfeld
Secretary of Defense
1000 Defense Pentagon
Washington, D.C. 20301-1000

Dear Mr. Secretary:

As you know, the Senate Armed Services Committee held a hearing today on the Department's proposed lease of 100 KC-767A tanker aircraft. There was a large attendance of members and an extensive exchange of questions and views in this hearing that lasted over three hours.

During the course of the hearing, Chairman Warner raised the option of leasing a smaller number of tanker aircraft – up to 25 -- to address the current, short-term need for additional tankers, to be followed by a traditional procurement, not a lease, of the remaining tankers, presumably under multi-year authority. Secretary Roche said that such an option had not been considered. We would like to draw your attention to section 367 of the Senate version of National Defense Authorization Act for Fiscal Year 2004, which requires the preparation of an analysis of alternatives for the Department's aerial refueling requirements. While this language is not directly targeted at the KC-767A lease proposal, it reflects the thinking of the Senate that other alternatives should have been considered.

We request that the Department analyze the option of leasing up to 25 tanker aircraft, followed by a procurement of the remaining aircraft. Such an analysis should include an examination of the budgetary and cost implications of various options for an incremental lease-buy, including an accelerated exercise of the purchase option in the proposed lease.

Additionally, given the emphasis on an apparent corrosion problem in the existing KC-135 tanker fleet, we would appreciate your providing us with a thorough assessment of the extent of those corrosion problems and the expected cost of addressing those problems if tanker aircraft were purchased according to the previous Air Force plan instead of leased sooner as more recently proposed. Also, please provide us with a justification of the Department's decision to pay $10.3 million per aircraft more than the $120.7 million per aircraft as determined by the Institute for Defense Analysis to be a reasonable purchase price.

The Committee will await your reply prior to meeting to discuss the pending lease proposal.

With kind regards,

Sincerely,

Carl Levin
Ranking Member

John Warner
Chairman

THE DEPUTY SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

SEP 22 2003

The Honorable John Warner
Chairman
Senate Armed Services Committee
Washington, D.C. 20510

Dear Mr. Chairman:

Thank you and the Committee for your consideration of the Department of Defense's proposal to lease 100 KC-767A aircraft. We value the opportunity to analyze the merits of leasing 25 tankers and buying 75 – and to respond to a request from Senator Roberts that we consider alternatives under the existing lease proposal -- as we attempt to meet the Department's critical need for air-refueling tankers. At your request, my staff has analyzed the option of leasing only the first 25 KC-767A tanker aircraft, and purchasing the remaining 75 aircraft through different mechanisms.

A summary of the new profiles, compared to the proposed 100-aircraft lease, is shown in the enclosed tables and charts. Each alternative creates different budgeting pressures that must be balanced against affordability in the near-term, the ultimate cost savings, and the timely delivery of tankers.

a. The purchase of one hundred tankers at the time of order, under the same multiyear conditions as the lease, requires an additional 13 billion dollars in the Future Years Defense Program (FYDP) but saves 5.5 billion dollars in total then-year dollars (TY$) versus the baseline lease of 100 tankers (Figure 1).

b. Alternatives that would entail the lease of 25 aircraft and then the purchase of 75 aircraft, using the proposed lease, with the purchase of 75 aircraft either at the time of the order or at the time of delivery of the aircraft, are shown in Figure 2. Purchase at the time of delivery requires a smaller increase in the FYDP, 4.6 billion dollars (TY$), but the savings versus the baseline lease are reduced to 3.5 billion dollars (TY$). Purchase before construction requires an increase in the FYDP of 11.1 billion dollars (TY$) but the savings versus the baseline lease are 4.1 billion dollars (TY$).

c. Finally, a lease of 25 tankers followed by a traditional multiyear procurement of 75 tankers requires an additional 10.5 billion dollars (TY$) in the FYDP but saves 2.7 billion dollars (TY$) versus the lease (Figure 3). The biggest

drawback to this approach is the need to negotiate totally new contracts; we believe this will cause at least a one-year delay to initiate the multiyear program.

As negotiated, the proposed lease of 100 aircraft has the flexibility to be converted to a purchase, in whole or in part, at the discretion of Congress, subject to availability of funds and authorization for purchase. As mentioned above and shown in Figure 2, applying the 25-75 split profile under the proposed lease saves 3 - 4 billion dollars over the total program, but requires significant additional budget authority (4.6 - 11 billion dollars) in the FYDP.

We understand the Committee's concerns about the future affordability of the lease and, as stated in the Air Force's KC-767 report, the DoD intends to request congressional authority to buy down mid-year program expenses by identifying 2.4 billion dollars in FY08-10 (Figure 4). This would enable us to purchase 26 of the leased aircraft. While this adds expense in the FYDP, it drives down costs in FY11 through FY15 and saves approximately 1.2 billion dollars in total program costs. The alternatives are summarized in Figure 5. The optimum approach must balance the total cost of the program, the additional funds needed in the FYDP, and the delivery schedule for the new capability. We believe that to begin the lease with an agreed-upon goal of requesting funds and authority to buy leased aircraft, according to a planned schedule, would permit the Air Force to initiate tanker modernization immediately. It also would balance cost savings with the realities of funding availability.

The Department remains steadfast in its desire to begin recapitalization now. The Department proposed a KC-X procurement program in the FY04 President's Budget submission. Because of affordability constraints, the KC-X program was scheduled to begin in FY06 and would have provided for the delivery of one tanker to the warfighter in FY09; the 100th aircraft would have been delivered in FY16, five years after the 100th would be delivered under the proposed lease. The lease schedule, therefore, delivers needed capability much sooner and avoids significant costs associated with the aging KC-135E fleet.

With respect to your question concerning the corrosion of the KC-135, assessments of the aircraft's service life indicate that fatigue alone will not compel the Air Force to retire the aircraft; rather, degradation of the aircraft's structure due to corrosion is the life-limiting factor. One of our greatest concerns is a potential fleet-wide grounding event that could emerge with little or no warning because of the unforeseeable effects of corrosion on the aircraft. I believe that we cannot accept the risk of unknown systemic failures that could ground the tanker fleet and cripple the global reach of U.S. and coalition forces. With availability decreasing, and costs increasing, we see the need to recapitalize this aging system before the next unforeseeable event significantly affects the fleet.

Although the estimate of price prepared by the Institute of Defense Analyses (IDA) does not have the fidelity of a negotiated position in a commercial market, it was an important tool that we employed during final negotiations. IDA's estimate provided critical leverage to drive the final negotiated price down significantly. In addition, we included two contract provisions, the "Return-On-Sales" cap and "Most-Favored-Customer" clause, which call for third-party audits of Boeing's books every year. Should IDA's estimate prove to be correct and Boeing's profit exceed the cap, Boeing would be obligated to refund the difference to the Government. We also have guarantees from Boeing that it has never sold the 767-200ER or 767-200C (the underlying aircraft) for a lower price, and will not do so during the term of the lease. Thus, these two auditable contract provisions protect the taxpayers and ensure that we will spend their money in a responsible manner.

Executing the negotiated lease contract now enables us to begin the recapitalization of our oldest aircraft fleet immediately. The lease proposal balances the urgent needs of the warfighter with the demands of our other vital programs, while staying within our budget. It also provides the Department and Congress the flexibility to shape future budgets, as needed, through various combinations of lease and purchase, should resources be made available. We propose to execute the lease contract now and to invest 2.4 billion dollars in FY 08-10 to buy down the outyear "bow wave," as shown in the enclosed charts. This would result in the purchase of 8 aircraft in FY08, 8 in FY09, 6 in FY10, and 4 in FY11. We also commit to address the Department's investment in tankers as we formulate the President's FY05 and beyond budgets, to determine whether we can further buy down the "bow wave." Under this approach, we are committed to purchase more than 26 KC-767 tanker aircraft, as the budget permits and in close coordination with the congressional defense committees. This strategy would save the time to renegotiate the lease and to establish a second contract, and would allow the Air Force to place the full one hundred aircraft on order.

We trust that this information, along with the discussions we have had with your professional staff members over the past week, provides the information needed to consider in detail our request for a "New Start." Again, we appreciate the support that you and the Committee have provided to ensure that we make the best investment in capability for our Nation. A similar letter has been sent to Senator Carl Levin.

Sincerely,

Paul Wolfowitz

Enclosure:
As stated

Budget Authority Requirements

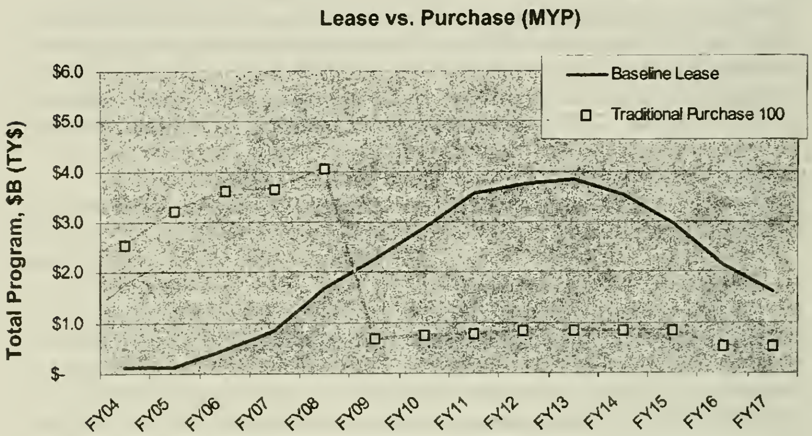


Figure 1

Budget Authority Requirements

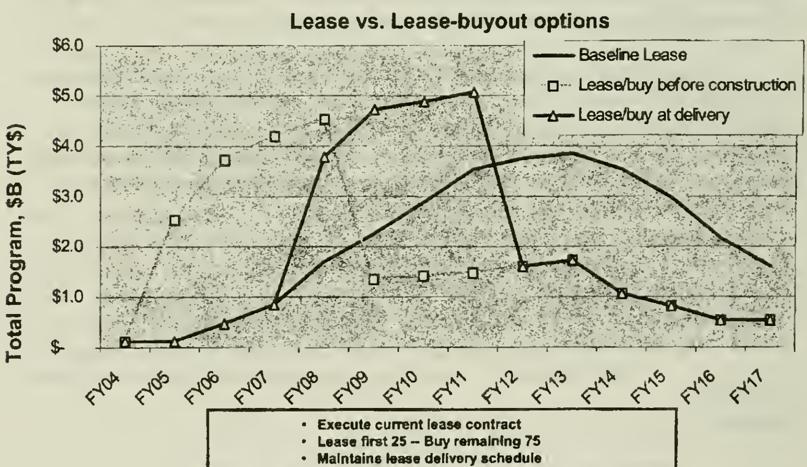
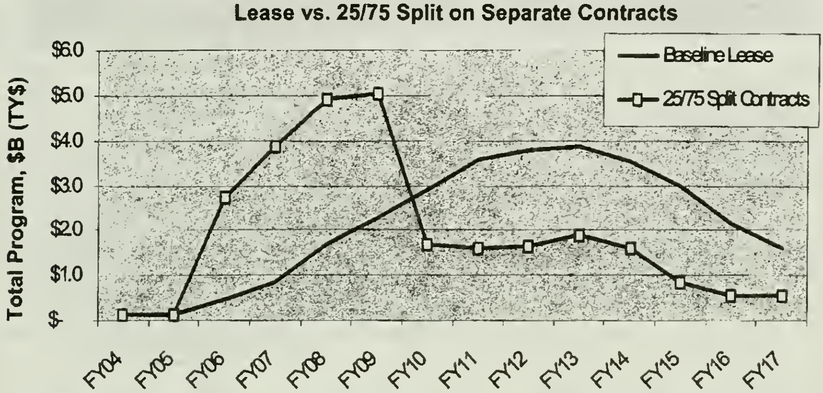


Figure 2

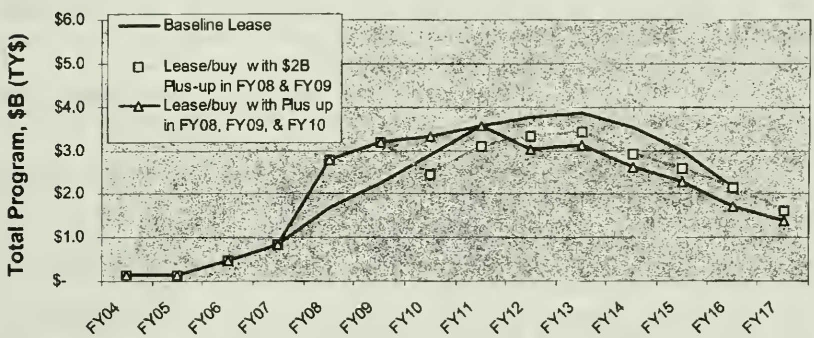
Budget Authority Requirements



- Lease 25 on contract similar to current – higher unit cost
- Buy 75 on traditional MYP contract
- Will delay initial program start by 10 months – requires negotiation start for 2 new contracts

Figure 3

Budget Authority Requirements



- Current lease contract with $1.1B add in FY08, $0.9B in FY09, $0.4B in FY10
- Match FY11 funding, and realize savings in FY12
- Buys 8 in FY08, 8 in FY09, 6 in FY10, and 4 in FY11
- Saves $1.2B (TY$) over the baseline lease total program

- Current lease contract with $1.1B add in FY08, $0.9B in FY09
- Begin to realize savings in FY10
- Buys 8 in FY08 and 8 in FY09
- Saves $0.8B (TY$) over the baseline lease total program

Figure 4

Alternate Profiles

Alternative Description	FYDP $ TY $B	Total $ TY $B	Delivered in FYDP	Comments
Lease 100	$5.5B	$29.8B	60	Execute lease for 100 planes according to current terms and conditions
Lease 25/Buy 75 Budget for Purchase @ Order	$16.6B	$25.6B	60	Assumes same unit price; requires Congressional approval to lease and purchase
Lease 25/Buy 75 Budget for Purchase @ delivery	$10.1B	$26.3B	60	Assumes same unit price; requires Congressional approval for lease of 100 planes now with future approval to purchase
Lease with $2B Plus-up	$7.5B	$29.0B	60	Assumes same unit price; requires Congressional approval to lease and purchase; adds $1.1B in FY08 and $0.9B in FY09; realizes savings starting in FY10; buys aircraft in FY08 (8) and FY09(8)
Lease with $2.4B Plus-up	$7.5B	$28.6B	60	Assumes same unit price; requires Congressional approval to lease and purchase; adds $1.1B in FY08, $0.9B in FY09, & $0.4B in FY10; realizes savings starting in FY12; buys aircraft in FY08 (8), FY09(8), FY10 (6), and FY11 (4)
Purchase 100	$18.4B	$24.3B	60	Requires most additional $ in FYDP and Congressional approval to purchase
Separate Contracts - Lease 25, Followed by "traditional" procurement of 75	$16.0B	$27.1B	40	Initial delay to renegotiate price and two new contracts; capital markets may not support lease—potentially unexecutable

Figure 5

Chairman WARNER. Now, Senator Levin.

Senator LEVIN. Thank you, Mr. Chairman.

The CBO wrote in August that the tanker lease fails to meet four of the six criteria, as has been indicated here this morning, that are required in OMB Circular A–11. It stated that the recording lease payments on a year-to-year basis would, "be at odds with standard government accounting principles." I think you said the same thing here this morning, Mr. Sunshine.

You indicated in that letter and here today, that purchase costs should be recorded as Federal expenditures at the time the aircraft are delivered.

However, I am told that if this lease is approved by this committee and goes into effect that CBO would then plan to score it as an operating lease despite what you have told us here; and that you would record the lease payments on a year-to-year basis. I have trouble understanding that. Is that true, first of all?

Mr. SUNSHINE. There is a difference between the scoring of legislation when legislation is being considered or being enacted and the actual budget implementation. This authority, if the committee approves this, will have been provided and there will in fact be no legislation for CBO to score. What will happen is this: the Defense Department will get appropriations for 2004 and later for 2005 and so on, and the administration will decide how it is going to record the obligations it makes for this transaction against the budget authority that is provided. It has indicated that it is going to record obligations under the criteria for an operating lease, not as if the transaction is a purchase.

Senator LEVIN. You are saying prospectively it should not be scored that way, but when you get down to scoring you are going to score it that way?

Mr. SUNSHINE. It has moved from the legislative arena, where we do scoring of bills, to the budget implementation arena, where ultimately OMB decides how to record actions actually in the budget itself.

Senator LEVIN. If OMB decides to proceed that way, you would not disagree with them at that time?

Mr. SUNSHINE. If OMB says that outlays in fiscal year 2004 are $2 point whatever trillion, CBO is not going to say, well, no, they are not really $2 point something trillion; they are more than that. Once we get to the point of actual budget implementation, that is in the domain of the administration. We have told you how we think they should do it, but the time at which the budget is implemented is beyond the point where we can do something about that.

Senator LEVIN. Dr. Nelson, you have indicated that you have determined that $120.7 million would be a reasonable unit purchase price for the aircraft. The Air Force, however, is stating that the unit price that they have negotiated, upon which they base either a purchase or a lease, is $138 million. The GAO has said that the actual price is going to be $173 million per aircraft if, as expected, the Air Force exercises its option to purchase the aircraft at the end of the lease.

Now, I am not here talking about the $1 point plus billion difference which has been described to us by the OMB Deputy Director this morning. I think we finally have taken that range of $150 million to $1.9 billion and, at least as far as my thinking is concerned, I am going to assume it is about $1 billion plus in additional costs on an apples to apples basis, using net present value, if we lease instead of purchase in the ordinary course.

But that $1.1 billion does not include what Dr. Nelson has said should be the cost of this plane in his best judgment, which is $120.7 million a unit, versus the price which has been negotiated, which is $138 million per unit. Are you with me so far?

Mr. CURTIN. I think so.

Senator LEVIN. So let me ask both of you, because this is no longer a question for you. You have done your work. You have given us your best estimate. It is $120.7 million and that is what we have to go on. Is what I have said accurate, Mr. Curtin, that there is also then a difference between that negotiated price per unit and what Dr. Nelson has said should be the reasonable price of the purchase?

Mr. CURTIN. Yes. As far as I can tell, you have described it pretty well. The reason the price—the $131 million is the starting point versus the $120.7 million, and you add on interest and you add on the price or the cost of paying the final residual value afterwards. So yes, it is $120 million versus——

Senator LEVIN. But the interest and the residual value piece is included in the $1.1 billion, if I am correct; is that correct or not? You know what I am saying?

Mr. CURTIN. Yes, I think that is probably a good way of looking at it.

Senator LEVIN. Which is the net present value difference.

Mr. CURTIN. Yes, that is fine, that is a good way.

Senator LEVIN. So I want to remove those items because we have already included those in the difference in net present value between purchase versus lease, which is the $1 billion plus.

Now I want to talk about something in addition to that which we are now being confronted with, which is that if Dr. Nelson's projections are correct that this should cost us $120 million per plane if we were just buying it right now, that the negotiated price upon which that lease is based or the purchase would be based is approximately $17 million more per plane than it, "should" be based on his assessment of what parts cost and inflation and the cost of labor and everything else that I assume goes into whatever proposal he made.

Mr. CURTIN. Yes, I think that is right on, yes.

Senator LEVIN. All right. What is their explanation for that? I do not know whether you have talked to the Air Force about that or to the OMB about that.

I do not think that was in your domain, was it, Dr. Nelson, or was it, to ask them, how come you have negotiated $138 million when you say it should be——

Dr. NELSON. We were not part of the negotiation process.

Senator LEVIN. Then let me ask the CBO, then the GAO. My time is up.

Just quickly, have you raised that question with the Air Force?

Mr. CURTIN. This whole IDA situation, it took us a long time before we finally got a copy of the IDA report and we were not sure whether the Air Force was ever going to actually give us that or not. So we were not able to get into much detail on that. But I think there was testimony yesterday at the Commerce Committee hearing from Secretary Roche, who said, yes, they had that, but it was advice, and they came up with a different number. They used that as part of their bargaining, but they did not use that number.

Senator LEVIN. All right. Mr. Sunshine?

Mr. SUNSHINE. That is not an area that we have explored.

Dr. NELSON. If I might, our role was to provide our best information—objective, independent—to our sponsors. Our sponsors were USD AT&L, and OSD PA&E. But we did have meetings with Air Force on issues of difference. We tried resolving data and sources, interpretation of data, analogies application, as best we could. But we were not part of the final negotiation.

Senator LEVIN. Thank you.

Mr. Chairman, if there is an urgent requirement here it seems to me we ought to try to find a way to meet it. I think we have to meet it in a way which is direct, straightforward, does not shift costs, more costs yet, to the future, that does not create this conflict in the future where huge amounts of money are going to be needed for the refueling tankers that are going to have to be purchased after this first 100. That is going to be a huge part of the Air Force budget, creates the problem which the chairman has talked about in terms of the overall budget.

I am willing to consider meeting an urgent requirement if that is what is concluded. But I think we have to do it in a way which is much more responsible, much more straightforward in terms of the present cost, and avoid hiding costs and avoid this uneven

playing field which has been so very clearly described this morning by our witness.

Thank you.

Chairman WARNER. Thank you, Senator. We will work together on that.

Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman, and I thank you and Senator Levin. Obviously, there is some thinking out loud going on here, and I would like to say that I think that both the chairman and the ranking member have come up with at least a concept that I think we ought to pursue.

I also would emphasize, and I think that my friends would agree, we do need an AOA. This may not be the best way to go. We need an intense study as to how serious these corrosion problems are, so that that would give us a better idea of the urgency and the schedule that is necessary for the replacement of the existing tanker fleet. I think both of those have to be key elements of any proposal or scheme that the chairman, the ranking member, and others may come up with.

But I do think that what the chairman has said is really something worth pursuing seriously. I appreciate Mr. Curtin's view that this might be on the surface of it—I know it is not an official position of yours, but it might be an option worthy of pursuit.

Would you agree it might be worth looking at, Mr. Sunshine?

Mr. SUNSHINE. Yes, I think we ought to explore ways, the various alternatives we have, for getting the airplanes quickly.

Senator MCCAIN. Dr. Nelson, I want to apologize if I misportrayed your position. I guess what I was trying to say is that the best estimate of cost per airplane that IDA could come up with was $120 million per copy and the Air Force's version is considerably more under the lease proposal. So I would like to correct the record if I misportrayed any of your position.

Does that take care of that?

Dr. NELSON. Thank you very much, Senator.

Senator MCCAIN. Thank you, Dr. Nelson. I know that you are in a difficult position here and I appreciate that.

Let me just discuss for 1 additional minute this issue of the lease-purchase. Mr. Curtin and Mr. Sunshine, if this were a lease-purchase it would be illegal, right?

Mr. CURTIN. It would not be an operating lease, yes. It could not fit under the current rules for an operating lease.

Senator MCCAIN. Right. But under the present setup we are going to pay 90 percent of the price of the airplane over a 6-year period, which has a lifespan of 30, 40 years roughly. So it would be almost insane to pay 90 percent of the cost of an airplane over the first 6 years of its, say, 30-year life—that is a conservative estimate—and then not purchase it. That would be the worst kind of economics that anybody could consider.

So really, it walks like a duck and it quacks like a duck, and everybody knows that they are not only talking about 100, they are talking about 200, in some cases 400 or 500 more. So I guess that that is a disturbing kind of element here in this whole scenario, because I think all of us on the committee would feel better by saying, as in response to previous questioning, we intend to buy it,

this is the best way that we can do it without disturbing the Air Force's budget and their other priorities. I can understand that argument. I may not agree with it.

But I would just like your comments on, would it make any sense whatsoever to pay 90 percent of the cost of anything that has a 30- or 40-year life period and then not purchase it at the end of that period of time? Mr. Curtin?

Mr. CURTIN. No. I think that is the point I made in my opening remarks, is that you have really thrown money down the drain if you turn those planes back after 6 years, because they do have a long life. If they are not the right plane, you have spent an awful lot of money on the wrong plane already, so turning them back at that point does not accomplish much.

You are acquiring these for their full life cycle.

Mr. SUNSHINE. It is not that the need is a temporary need. The need is a permanent need, and it is probably a growing need. You do not have anything to replace them with if you turn them back after 6 years, and you have just exacerbated the problem. So if someone comes along 5 years into the lease and says let us do an analysis and let us decide whether it is worth keeping these aircraft or not, the analysis almost certainly has to conclude that we have to keep them because we have already paid for most of them.

Senator MCCAIN. I thank you, Mr. Chairman. I thank the witnesses.

Chairman WARNER. This has been very helpful testimony, gentlemen, and I commend each of you. I thank my ranking member and you, Senator McCain, you have spent a lot of time on this issue, and this committee. I am just very impressed with the depth, the sincerity, the commitment, and the attendance we had today to address this important issue.

So I will consult with my ranking member and members of the committee and we will probably have further statements on behalf of the committee as to our procedures we are going to follow as we address our responsibility under this request.

Senator McCain, I did get from the Inspector General a reply. It tracks pretty well what you had said, with no reference to the word "criminal" at this point in time. I will place this into the record. I will actually read it for those who are following the hearing: "Dear Chairman Warner: You have inquired as to whether or not I am investigating someone in connection with the Air Force tanker proposal.

First of all, it is Inspector General policy generally not to comment publicly on the incidents of ongoing investigative activities. However, when others have already publicly commented on the IG investigative activities"—and there has been some press coverage and so forth—"in an inaccurate manner, it is appropriate and sometimes necessary for the Inspector General to set the public record straight."

"As indicated to you"—that is Warner—"yesterday, my investigative staff has received information from another Senator's staff that we are currently reviewing to determine whether or not we should open an investigation. Procedurally, we are still conducting a 'preliminary inquiry', which is standard operating procedure for my staff on the receipt of any such information. We may or may not

determine to open an investigation. In the course of this preliminary inquiry, we determine whether the information is credible, whether it alleges violation of a prescribed standard, and whether the information is sufficient to enable a focused investigation. Although we generally hope to complete preliminary inquiries within 10 days, that aspirational standard depends upon the complexity and quantity of the information we are reviewing."

"The enclosed memorandum, dated May 1, 2003, describes our standard operating procedures," and so forth.

That is in response.

[The information referred to follows:]

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

SEP 4 2003

The Honorable John W. Warner
Chairman
Committee on Armed Services
United States Senate
Washington, D.C. 20510-6050

Dear Chairman Warner:

You have inquired as to whether or not I am investigating someone in connection with the Air Force tanker lease proposal.

First of all, it is Inspector General (IG) policy generally not to comment publicly on the substance of ongoing investigative activities. However, when others have already publicly commented on IG investigative activities in an inaccurate manner, it is appropriate and sometimes necessary for the Inspector General to set the public record straight.

As I indicated to you yesterday, my investigative staff has received information from another Senator's staff that we are currently reviewing to determine whether or not we should open an investigation. Procedurally, we are still conducting a "preliminary inquiry," which is standard operating procedure for my staff on the receipt of any such information. We may or may not determine to open an investigation. In the course of this preliminary inquiry, we determine whether the information is credible, whether it alleges a violation of a prescribed standard, and whether the information is sufficient to enable a focused investigation. Although we generally hope to complete preliminary inquiries within ten days, that aspirational standard depends upon the complexity and quantity of the information we are reviewing.

The enclosed Memorandum, dated May 1, 2003, describes our standard operating procedure for satisfying my duty under Section 4(d) of the Inspector General Act, "whenever the Inspector general has reasonable grounds to believe there has been a violation of Federal criminal law."

I trust this procedural description is responsive. Please call me if you have any further questions or concerns.

Sincerely,

Joseph E. Schmitz

Enclosure:
As stated

cc: The Honorable Carl Levin
Ranking Minority Member

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

MAY - 1 2003

MEMORANDUM FOR CIVILIAN AND MILITARY PERSONNEL EMPLOYED BY AND ASSIGNED TO THE OFFICE OF THE INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE

SUBJECT: IG Act Duty to Report Violations of Federal Criminal Law

References: (a) Inspector General Act of 1978, as amended
(b) Inspector General Policy Memorandum of February 10, 2003, "Inspector General Act Implementation and Office of Inspector General Policy Guidance"
(c) Inspector General Policy Memorandum of April 18, 2003, "Duty of the Inspector General to Maintain Effective Working Relationships with the Department of Justice (DOJ) in the Investigation of Crimes Involving the Programs, Operations, or Personnel of the Department of Defense"

Purpose: To provide specific guidance on Section 4(d) of Reference (a), as implemented by Reference (b).

Statutory Duty: Section 4(d) of Reference (a) requires the Inspector General to "report expeditiously to the Attorney General whenever the Inspector General has reasonable grounds to believe there has been a violation of Federal criminal law."

Policy Guidance: It is the policy of the Office of Inspector General to carry out the letter and the spirit of the Inspector General's explicit duty under Section 4(d) of Reference (a) to "report expeditiously to the Attorney General" any and all "reasonable grounds to believe there has been a violation of Federal criminal law." This statutory duty is satisfied once an official of the Office of the Inspector General formally notifies either the cognizant Assistant United States Attorney or the Assistant Attorney General (Criminal Division) of the "reasonable grounds." Consistent with the policy promulgated in Reference (c) to "maintain effective working relationships with the DOJ," this notification can be in writing, e-mail, or oral memorialized by a memorandum to the file. In the event that this type of working-level notification is impractical, the Inspector General will send a letter directly to the Attorney General in form similar to the attachment.

Effective Date: This Policy Memorandum is effective immediately.

Joseph E. Schmitz

Attachment:
As stated

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

SAMPLE

The Honorable John Ashcroft
Attorney General
Washington, D.C. 20530

Dear Mr. Attorney General:

In accordance with my responsibility under Section 4(d) of the Inspector General Act of 1978, as amended (Title 5, U.S.C., Appendix 3), to "report expeditiously to the Attorney General whenever the Inspector General has reasonable grounds to believe there has been a violation of Federal criminal law," the following information is provided:

[Insert statement of facts]

Preliminary inquiry by the Defense Criminal Investigative Service (DCIS) has revealed that there are reasonable grounds to believe there has been a violation of Federal law, __________. See ________ U.S.C. ____________.

In addition to DCIS, ______________________ are involved in investigating this matter. _____________ have also been informed. Please contact me or the Acting Deputy General Counsel (Inspector General), Department of Defense, at (703) 604-8350 if you have any questions or concerns about efforts to ensure prompt, coordinated attention to this important matter.

Sincerely,

Joseph E. Schmitz

cc:
General Counsel of the Department
of Defense

[CLASSIFICATION]

INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202-4704

SEP 15 2003

The Honorable John Warner
Chairman
Committee on Armed Services
United States Senate
Washington, D.C. 20510-6050

Dear Mr. Chairman:

This is in further response to your inquiry concerning whether this office is conducting an investigation of someone in connection with the Air Force tanker lease proposal.

By letter of September 4, 2003, I advised that my investigative staff has received information from another Senator's staff relating to the Air Force lease proposal, and that the information was the subject of a "preliminary inquiry." This is to advise you that a determination has been made that sufficient credible information exists to warrant the initiation of an investigation. Noting your interest in this matter, I will advise you of the findings of that investigation upon its completion.

Please contact me or Mr. John R. Crane, Director, Office of Communications and Congressional Liaison, at (703) 604-8324, if you have any further questions regarding this matter.

Sincerely,

Joseph E. Schmitz

cc: The Honorable Carl Levin
Ranking Minority Member

Senator LEVIN. Mr. Chairman, I have a request to make if it is appropriate. We have this issue about the cost, the purchase price for the plane, and there is quite a difference here between $120 million and the $137 million which has been negotiated. The GAO has not had an opportunity to really look at the IDA analysis as I understand Mr. Curtin's testimony. I would like them to look at that analysis because as part of the approach which we have talked about and you outlined here I think we have to address that issue in some way.

That is actually, I believe, a larger number than the $1 point plus billion delta in the net present value approach. So I do think, if it is appropriate, Mr. Chairman, that we ask the GAO to give us a report on that narrow issue to supplement their testimony here today.

Chairman WARNER. I would suggest that a letter be prepared for our joint signatures and it will be sent out this afternoon.

[The information referred to follows:]

September 5, 2003

The Honorable David Walker
Comptroller General
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Walker:

We greatly appreciate the contribution that the General Accounting Office has made to our Committee's understanding of the issues raised by the proposed Air Force lease of 100 Boeing 767 tanker aircraft.

At today's hearing, the GAO witness, Mr. Neal Curtin, indicated that he was unable to assess the independent price estimate prepared by the Institute for Defense Analysis, because this estimate had not been provided to the GAO until recently. Now that the IDA estimate has been made available to the GAO, we would appreciate your views on IDA's analysis. Because the tanker lease proposal is currently pending before the Armed Services Committee, we would appreciate if you would present us with this information as soon as possible.

Thank you for your assistance in this matter.

Sincerely,

Carl Levin
Ranking Member

John Warner
Chairman

GAO

Accountability • Integrity • Reliability

United States General Accounting Office
Washington, DC 20548

October 14, 2003

The Honorable John Warner
Chairman
The Honorable Carl Levin
Ranking Member
Committee on Armed Services
United States Senate

Subject: *Military Aircraft: Observations on DOD's Aerial Refueling Aircraft Acquisition Options*

During the Senate Armed Services Committee's September 4, 2003 hearing on the Department of Defense's (DOD) proposed lease of 100 Boeing KC-767A aerial refueling aircraft, you expressed concern about a significant "bow-wave" funding requirement in future years to pay for leasing and then buying these 100 aircraft at the end of their leases, while continuing efforts to modernize the remainder of the tanker fleet. Subsequently, you requested that DOD analyze the option of leasing 25 aircraft, followed by a procurement of the remaining 75 aircraft. The Deputy Secretary of Defense responded to your request on September 22, 2003, identifying several alternative acquisition strategies, with associated cost and savings estimates. On September 25, 2003, you asked that GAO review the DOD response and assess the validity of the department's assumptions and the accuracy of the cost and savings estimates, and identify any other alternative acquisition strategies that the Committee should consider. This letter responds to your request.

DOD's response compared the six acquisition options offered by the Deputy Secretary to acquire 100 KC-767A aircraft: (1) leasing all 100 aircraft as outlined in the Air Force plan reported to the Congress in July 2003; (2) purchasing all 100 aircraft at the time of order under the same multiyear conditions as the lease; (3) leasing the first 25 aircraft and purchasing the remaining 75 when the order is placed; (4) leasing the first 25 aircraft and purchasing the remaining 75 when the aircraft are delivered; (5) leasing 25 aircraft, followed by a traditional multiyear procurement of 75 aircraft under a separate contract, and (6) leasing all

100 aircraft initially, then planning to seek $2.4 billion between fiscal years 2008-2010 to purchase 26 of the 100 aircraft.[1]

To perform our work, we met with DOD and Air Force officials to obtain details on these options, including the assumptions and information used to generate the cost and savings estimates contained in DOD's response. We also conducted our own independent analysis. See enclosure I for more details on our scope and methodology.

Summary

In our opinion, the assumptions used by DOD to develop its analysis of acquisition options generally appear to be reasonable, and the computations of the cost and savings estimates associated with these options appear to be accurate based on the current terms and conditions of the negotiated lease. We do believe, however, that the costs and savings numbers could be further refined under the options involving purchase. For example, Air Force officials indicated that The Boeing Company would pay the cost to underwrite the issuance of the bonds needed for financing in the original lease option. However, they could not definitively say whether the underwriting costs were included in the $131 million price for each aircraft. Because fewer bonds, if any, would be issued under the options involving purchase, the costs should be lower and the savings higher.

With the exception of the fifth option—Chairman Warner's suggestion of leasing 25 aircraft, followed by a purchase of the remaining 75 aircraft at delivery—DOD did not significantly deviate from the costs, schedules, and support provisions contained in its July 10, 2003 report to the Committee and the Congress. Air Force officials stated that their analysis of options complied with the Chairman's request and that analyses outside the proposed lease's terms and provisions would be academic exercises that might not be representative of the final negotiated prices. These officials also stated that changes from the proposed contract would require new negotiations and new review and approval actions, and consequently would lead to additional delays.

[1] Figures 4 and 5 of the Deputy Secretary's letter also mentioned another version of this—to identify $2 billion in fiscal year 2008-2009, bot this option was not discussed in the narrative of the letter.

In addition to the options presented by DOD, we believe two other possible approaches—lease fewer tankers or purchase tankers on a slower schedule—may be of interest to the Congress. Both options would involve fewer than 100 aircraft—one through leasing and one through direct purchase. Both options have advantages and disadvantages that we have not fully explored in the time available.

Our Assessment of DOD's Analysis

In our opinion, the assumptions used by the DOD to develop its analysis of acquisition options generally appear to be reasonable, and the computations of the cost and savings estimates associated with these options appear to be accurate based on the current terms and conditions of the negotiated lease. Table 1 summarizes DOD's estimated costs and savings for the six options it considered, followed by our observations on the approach, data, and assumptions used. As indicated in table 1, the current proposal being considered by the Congress for the Air Force—the lease of 100 KC-767A aircraft for 6 years each, followed by their purchase at the end of the lease—is the most costly of the options over the next decade, requiring about $29.8 billion (then-year dollars). As we have testified,[2] leasing requires the least up-front funding to the 2004-2009 Future Years Defense Program (FYDP), about $5.5 billion (then-year dollars). While purchase of the 100 aircraft would cost the least amount over the long term—$24.3 billion, or $5.5 billion less than the lease, it would require the largest up-front increase to the FYDP—nearly $13 billion more than the lease option. DOD approved the lease proposal, at least in part, because it requires the least amount of up-front funding for refueling aircraft while keeping the funding for other programs intact.

[2] *Military Aircraft: Observations on the Proposed Lease of Aerial Refueling Aircraft by the Air Force.* GAO-03-923T. Washington, D.C.: September 4, 2003.

Table 1: Options and Cost Comparisons (then-year dollars in billions)

Options	Cost during FYDP[a]	Total costs[b]	Savings over current lease proposal
1. Lease 100	5.5	29.8	NA
2. Purchase 100	18.4[c]	24.3[c]	5.5
3. Lease 25/buy 75, pay when order	16.6	25.6	4.2
4. Lease 25/buy 75, pay at delivery	10.1	26.3	3.5
5. Separate contracts (lease 25, buy 75)	16.0	27.1[c]	2.7
6. Lease with $2.4 billion increase	7.5	28.6	1.2

Source: GAO analysis of Air Force data.

[a]Aircraft cost only. Includes cost of purchasing leased aircraft at end of lease.

[b]Includes operating and support costs, other government costs, and military construction.

[c]Assumes that multi-year procurement authority was granted.

We have the following comments and observations on DOD's options:

- The estimated costs and savings for all options except for number 5 are based on the cost figures from the currently negotiated lease with Boeing. Based on our analysis, we believe these represent a reasonable estimate of the likely total costs and savings in then-year dollars. We do think, however, that the costs and savings numbers could be further refined in the options involving purchase or lease. For example, Air Force officials indicated that The Boeing Company would pay the cost to underwrite the issuance of the bonds in the original lease option. However, they could not definitively say whether the underwriting costs were included in the $131 million price for each aircraft. Because fewer bonds, if any, would be issued under the options involving purchase, the costs should be lower and the savings higher.
- The fifth option entails a contract for leasing 25 aircraft followed by a separate contract for a traditional multi-year procurement. With this option, Air Force officials stated that the capital markets may not support the lease because of risk concerns, particularly in exercising the option to buy the planes at the end of the lease, and, therefore, the option is potentially unexecutable. In examining this concern, we would point out that 90 percent of the present value of the fair market value of the aircraft will have been paid at the end of their 6-year leases, and it would make little sense not to purchase the planes. Also, given the long-term need to replace the tanker fleet, it is unlikely that the planes would not be purchased at the end of the lease.
- All of the options except for number 5 assume delivery of 60 aircraft during the FYDP period on the same delivery schedule. DOD believes

option 5 would require new negotiations, internal and external review, and congressional approval—a process that could take as long as a year and could result in higher prices than currently negotiated for the lease of 100 aircraft. Because of this potential delay, DOD also estimates that this option would result in delivery of only 40 aircraft during the FYDP period. Based on our analysis, we believe the costs and savings estimates by the Air Force are more speculative for this option. It is unclear to us why the process to negotiate and process the changes would take so long to gain final approval. Also, any purchase of the aircraft, including those specified in each of the other options, required congressional approval.

- As presented by DOD, all the options considered represent a trade-off between more up-front budget authority during the FYDP period and more potential savings over the life of the program.
- All of the options except for number 5 assume the same early delivery schedule as the currently proposed lease; that is, the first 4 aircraft would be delivered at the end of fiscal year 2006, 16 in 2007, and 20 per year in subsequent years until 100 have been delivered. This assumes that it is more urgent to begin replacement of the tanker fleet now rather than proceed with the previously planned procurement schedule, which the Air Force has said would begin delivering aircraft in fiscal year 2009.
- DOD was not asked to and did not assess other options outside the terms and provisions of the existing lease, which could potentially provide additional cost savings. For example, what costs and savings might accrue if the number of KC-767A aircraft leased and/or procured varied from 100 aircraft? How would competitive bidding by commercial airlines and independent maintenance, repair, and overhaul facilities for KC-767A maintenance and training support affect costs and savings? How would program costs change if the purchase price per plane was closer to the $120.7 million estimate postulated by the Institute for Defense Analyses, rather than the $131.0 million price contained in the contract?[3]
- The Deputy Secretary's letter presenting the Air Force savings estimates states that the department proposes to find an extra $2.4 billion to buy out the leases for 26 aircraft in the 2008-10 timeframe. Air Force officials told us that DOD will try to identify these funds in the current FYDP and may even seek support from the Army, Navy, and Marine Corps. This is option number 6 in the table. DOD and Air Force acquisition officials we spoke with said that the Deputy Secretary of Defense's letter to the committee represents a firm commitment to identify these funds in the fiscal year

[3]At your request, we reviewed the Institute of Defense Analyses study and concluded that its methodology was reasonable. See *Military Aircraft: Institute for Defense Analyses Purchase Price Estimate for the Air Force's Aerial Refueling Aircraft Leasing Proposal*. GAO-04-164R. Washington, D.C.: October 14, 2003.

2008-2010 time frame. If the Congress agreed to that approach, it might want more assurance that the increase in funding would really occur, otherwise the savings will not materialize and the Congress may simply be asked to provide additional budget authority.

The initial 100 KC-767A aircraft being discussed represent only about 20 percent of the KC-135 inventory. DOD and the Air Force have stated that tanker replacement efforts need to continue beyond these aircraft, and that this will be an expensive and lengthy undertaking. As a result, the funding requirements for tanker replacement will extend for many years beyond those addressed in the lease proposal, and will have to compete with other high priority programs among the Air Force and the other services in a fiscally-constrained environment. Thus, the Committee's concern about a tanker "bow wave" is appropriate and relevant as we pointed out in our September 4, 2003 testimony, regardless of the option chosen for the first 100 aircraft. The options involving a 25/75 split of leased and purchased aircraft all have a positive effect on the "bow wave" concern beyond fiscal year 2012, as was discussed at the September 4, 2003 hearing. By committing more funding in the early years of the program, costs are reduced considerably in the out years. This should ease the burden on budgets for follow-on procurements of tanker aircraft. The proposal to plus up the budget by $2.4 billion to buy out 26 of the leases also has a positive effect on reducing the bow wave, but not to as great an extent as the other options. This approach still incurs costs in the $3 billion range in fiscal year 2011-13. To illustrate the effect of DOD's various options on this long-term spending picture, we have developed charts showing the budget authority that would be required to execute the acquisition of the first 100 aircraft followed by a subsequent purchase of another 100 KC-767A aircraft. (See enclosure II).

Other Alternative Approaches

The DOD response represents a reasonable analysis of the 25/75 split option and it offers an additional option—option number 6, which proposes to add $2.4 billion for tankers to be used to buy out leases for 26 aircraft. In effect, this would be a "lease 74/buy 26" approach. We believe at least two additional options may be of interest to the committee as it considers its decision. These include the following:

- **Lease fewer tankers.** Section 8159 of the 2002 Act[4] authorized a pilot program for leasing no more than 100 Boeing 767s as tankers. The act did not specify leasing 100; it set 100 as the maximum. A smaller leasing program would still meet the intent of the act, would be less expensive, would start replacement of the KC-135s, and most importantly, would allow some time for the Air Force to study tanker force requirements and conduct a thorough analysis of alternatives before committing to a large acquisition program.[5] Such an approach would probably need to include leasing as many as 40 to 50 aircraft to provide sufficient time for the needed studies. This approach is still more expensive than purchase, and it might still involve the use of the special purpose entity[6] to facilitate lease financing, but it allows the program to proceed with early delivery of aircraft without disruption to Air Force budgets in the short-term. We do not know what effect this approach would have on delivery schedules or whether Boeing would agree to the same lease terms for fewer aircraft.
- **Purchase tankers on a slower schedule.** The Air Force plans to spend about $5.5 billion during the FYDP period for the proposed lease, and the Deputy Secretary stated in his letter to you that the department proposes to identify an additional $2.4 billion during this period to buy out some of the leases. If that total of $7.9 billion were applied toward purchase of tankers, it would represent a reasonable start toward replacing the tanker fleet through a normal acquisition process. Because the Boeing 767 commercial aircraft has been in production since 1982 and thus represents little development risk, the Air Force should be able to negotiate a multi-year procurement for a substantial number of aircraft. This would not provide the same firm order for 100 aircraft in the current lease proposal, but it would still represent a large transaction for Boeing on its 767 production line. However, this approach might involve delays in deliveries of the first aircraft, depending on how much budget authority is available

[4] Department of Defense and Emergency Supplemental Appropriations for Recovery from and Response to Terrorist Attacks on the United States Act, Pub. L. 107-117, § 8159, 115 Stat. 2230, 2284-85.

[5] Section 309 of the Emergency Supplemental Appropriations for Iraq and Afghanistan Security and Reconstruction for Fiscal Year, 2004, S. 1689, 108th Cong. § 309 (2003), requires that the Secretary of Defense submit a report to the congressional defense committees describing an analysis of alternatives for replacing the capabilities of the fleet of KC-135 fleet aircraft. The Air Force has indicated, however, that it will probably initiate a tanker requirements study sometime between fiscal years 2004-2006, followed by a formal analysis of alternatives (AOA). Air Force officials have stated that a formal AOA could take up to two years to complete.

[6] The Special Purpose Entity would be a trust created under the laws of Delaware that would issue bonds to raise sufficient capital to purchase the new aircraft from The Boeing Company and lease them to the Air Force.

in fiscal year 04 and fiscal year 05. Deliveries might also have to be spread over a longer period if the Air Force and DOD do not provide additional funding priority for tankers. This approach, too, would provide the Air Force some time to study tanker requirements and analyze options before committing to a large program.

We could not develop costs for these two options in the time available. Air Force officials believe that adoption of either of these options would delay delivery of the first aircraft and further believe that while less costly in the short term, the proposals could increase total program costs.

Agency Comments and Our Evaluation

In oral comments on a draft of this correspondence, DOD and Air Force officials generally concurred with our analysis. These officials also pointed out that their analysis, as contained in the letter from the Deputy Secretary of Defense, was limited specifically to the questions asked of them by you although they have considered other options that were not included.

We conducted this work from September to October 2003 in accordance with generally accepted government auditing standards.

Unless you announce its contents earlier, we plan no further distribution of this letter until 10 days from its issue date. At that time, we will send copies of this letter to the Chairman and Ranking Member of the Committee on Armed Services, House of Representatives, and the defense subcommittees of the Senate and House Committees on Appropriations. We will send a copy to the Chairman, Subcommittee on Readiness, House Committee on Armed Services, for whom we are conducting a broader body of work in this area. We will also send copies to the Secretary of Defense and the Director of the Office of Management and Budget. We will also make copies available to other interested parties upon request. In addition, the letter will be available at no charge on the GAO Web site at http://www.gao.gov.

We appreciate this opportunity to be of assistance. If you or your staffs have any questions regarding this letter, please contact me at (202) 512-4914 or Brian J. Lepore, Assistant Director, at (202) 512-4523. Other key contributors to this review were Ann M. Dubois, Joseph J. Faley, Jennifer K. Echard, Kenneth W. Newell, Madhav S. Panwar, Charles W. Perdue, Kenneth E. Patton, and Tim F. Stone.

Neal P. Curtin

Neal P. Curtin, Director
Defense Capabilities and Management

Enclosures

Enclosure I: Scope and Methodology

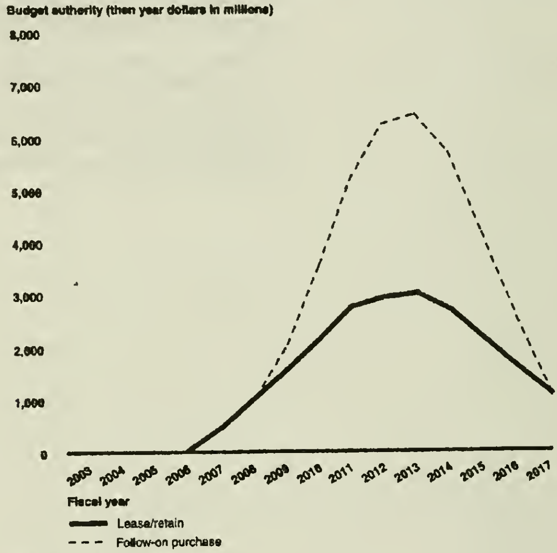
To assess the validity of the Department of Defense's (DOD) assumptions, accuracy of cost and savings estimates associated with the various options addressed by the Deputy Secretary of Defense in his response to the Committee, and to identify alternative acquisition strategies, we met with DOD and Air Force officials to discuss detailed information related to the options. These discussions included the nature and scope of the options selected, as well as the assumptions and methodologies used in the analyses. We also obtained and reviewed Air Force data used to generate the cost and savings estimates contained in DOD's response, validated that the data was appropriately included or excluded to support the details of the individual options chosen, tested the accuracy of the computations, and conducted our own independent analyses.

To assess the funding impacts of the various options when combined with a subsequent purchase of 100 aircraft, we compared Air Force data for each of the options to a postulated buy of an additional 100 aircraft beginning in fiscal year 2012 at the rate of 20 aircraft per year. We used the Air Force's purchase price for the aircraft, spread the payments for each aircraft over a 4-year period per Air Force data, and adjusted the data to reflect then-year dollars.

Enclosure II: Impact of Air Force Options on Budget Authority Requirements

Follow-on procurements to the initial lease of 100 aircraft will be a necessary part of any tanker replacement program. Because the funding requirements of the proposed lease are deferred until later years, those requirements will impact the requirements for subsequent tanker acquisitions. The following figures provide an approximate illustration of how the various options effect the funding requirements for future refueling aircraft purchases beyond the first 100.

Figure 1: Annual Budget Authority Required to Initially Lease 100 Aircraft and to Purchase 100 Follow-On Aircraft

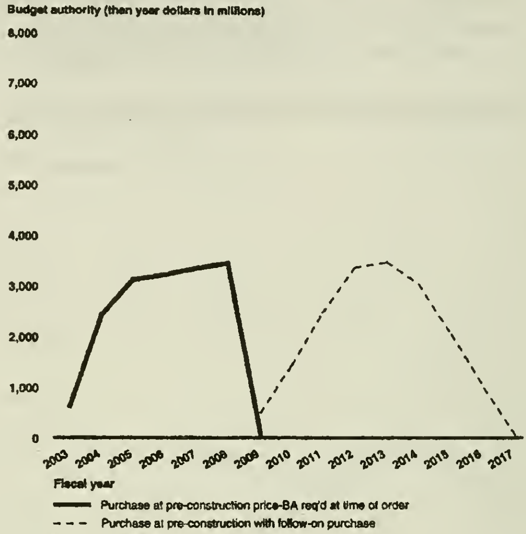


Source: GAO analysis of Air Force data.

Combining a follow-on purchase of 100 aircraft with the Air Force's original proposal to lease 100 aircraft, would require maximums of about \$6.3 billion and \$6.4 billion in budget authority in fiscal years 2012 and 2013 respectively, as shown in figure 1. About \$3.6 billion would be required during the current FYDP and a total of about \$38.5 billion would be required over the entire program.[1]

[1] These totals include only procurement costs and do not represent total program costs.

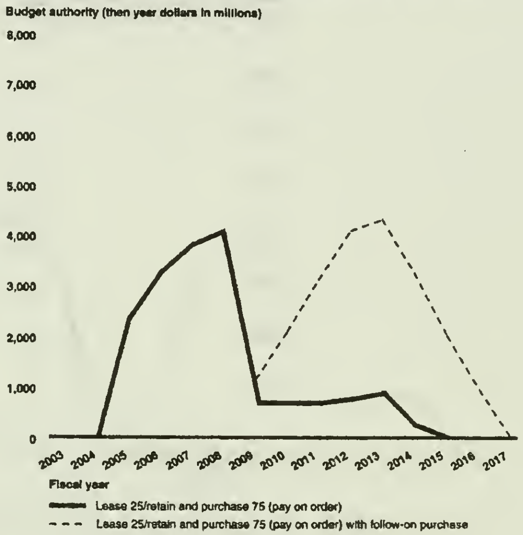
Figure 2: Annual Budget Authority Required to Purchase Both an Initial 100 And Second Block of 100 Aircraft



Source: GAO analysis of Air Force data.

Purchasing the initial 100 aircraft, when combined with a follow-on purchase, would have the least impact on overall budget authority requirements. As figure 2 shows, an initial purchase of 100 aircraft followed by a subsequent purchase of an additional block of 100 aircraft would require maximums of about $3.4 billion in budget authority in fiscal years 2008 and 2013 to procure the aircraft. About $15.8 billion would be required during the current FYDP and a total of about $33 billion would be required over the entire program to procure the 200 aircraft.

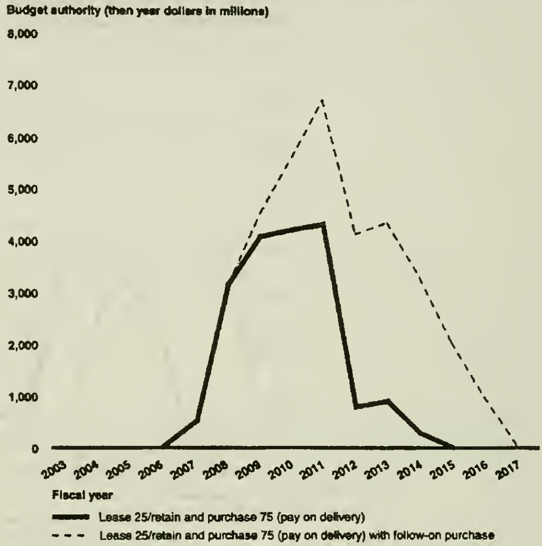
Figure 3: Annual Budget Authority Required to Lease 25 Aircraft and to Purchase 75 Aircraft at Time of Order and to Purchase 100 Follow-On Aircraft



Source: GAO analysis of Air Force data.

Combining a follow on purchase of 100 aircraft with the alternative of initially leasing 25 aircraft and purchasing 75 others, would require maximums of about $4.1 billion and $4.3 billion in budget authority in fiscal years 2012 and 2013, respectively, as shown in figure 3, if the 75 aircraft were paid for when ordered. About $14.5 billion would be required during the current FYDP and a total of about $34.3 billion would be required over the entire program.

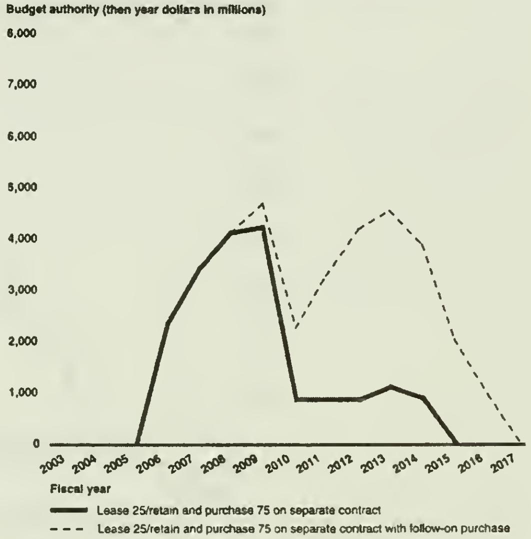
Figure 4: Annual Budget Authority Required to Lease 25 Aircraft and to Purchase 75 Aircraft at Time of Delivery and to Purchase 100 Follow-On Aircraft



Source: GAO analysis of Air Force data.

Paying for the initial 75 aircraft in the previous option on delivery would require maximums of about $5.6 billion and $6.7 billion in budget authority in fiscal years 2010 and 2011, respectively, as shown in figure 4. About $8.1 billion would be required during the current FYDP and a total of about $35 billion would be required over the entire program.

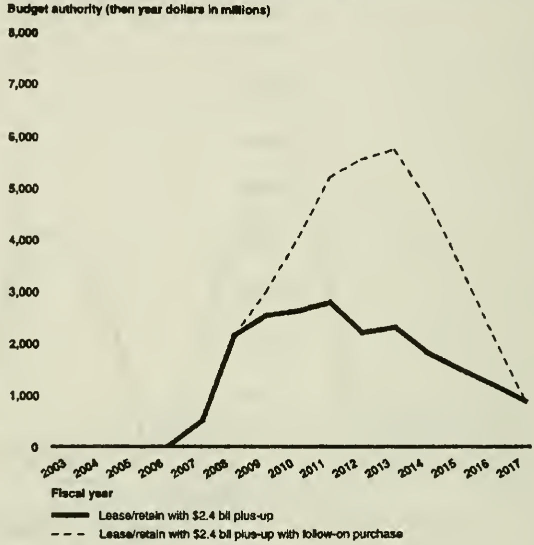
Figure 5: Annual Budget Authority Required To Initially Lease 25 Aircraft and to Purchase the Remaining 75 Aircraft of the Initial Block under a Separate Contract and to Purchase 100 Follow-On Aircraft



Source: GAO analysis of Air Force data

Combining a follow-on purchase of 100 aircraft with the option of initially leasing 25 of the initial 100 aircraft and negotiating a separate contract for the purchase of the remaining 75 aircraft of the initial block, would require maximums of about $4.6 billion and $4.5 billion in budget authority in fiscal years 2009 and 2013, respectively, as shown in figure 5. About $14.4 billion would be required during the current FYDP and a total of about $35.3 billion would be required over the entire program.

Figure 6: Annual Budget Authority Required to Initially Lease 74 Aircraft and to Purchase 26 Aircraft and to Purchase 100 Follow-On Aircraft



Source: GAO analysis of Air Force data.

Combining a follow-on purchase of 100 aircraft with the option of purchasing 26 of the initial 100 aircraft, would require maximums of about $5.5 billion and $5.7 billion in budget authority in fiscal years 2012 and 2013, respectively, as shown in figure 6. About $5.6 billion would be required during the current FYDP and a total of about $37.3 billion would be required over the entire program.

Chairman WARNER. I will be consulting with my colleague regarding my proposal where we look at a unit of 25 leased aircraft for the present time.

Thank you very much. The hearing is concluded.

[Questions for the record with answers supplied follow:]

QUESTIONS SUBMITTED BY SENATOR JAMES M. INHOFE

TANKER MAINTENANCE COSTS

1. Senator INHOFE. Secretary Roche, can you explain the 767 maintenance costs indicated in the July GAO report of $8 million?

Secretary ROCHE. The GAO stated, "The Air Force estimates that the maintenance agreement with Boeing will cost between $5 billion and $5.7 billion during the lease period. It has negotiated an agreement with Boeing as part of the lease negotiations, covering all maintenance except flight-line maintenance to be done by Air Force mechanics. This represents an average of about $50 million per aircraft, with each aircraft being leased for 6 years, or over $8 million per year."

2. Senator INHOFE. Secretary Roche, how can the annual maintenance costs of a new aircraft be double the cost of the KC–135?

Secretary ROCHE. It is not. Comparing the costs based on actual utilization planned, the KC–767 is much more cost effective. The support cost-per-flying hour (calendar year 2002 dollars) for the KC–767 is $10,800 per hour. The support cost-per-flying-hour for the KC–135E is $27,000 and $17,700 for the KC–135R. These are the estimated costs for operations in 2012 (expressed in calendar year 2002 dollars) when 100 KC–767s will be in the inventory. If the flying hours for KC–135 were increased to 750 flying hours per year (the projected flying hour for the KC–767), the support cost-per-flying-hour for the KC–135E would be $16,300 and $10,600 for the KC–135R.

3. Senator INHOFE. Secretary Roche, did the annual maintenance costs of the KC–135 mentioned in the GAO report include any one-time modifications such as the Pacer CRAG (Compass, Radar, and Global Positioning System)?

Secretary ROCHE. The Air Force contacted the GAO analysts responsible for the July 2003 report. The GAO analysts advised that the costs mentioned in the July 2003 GAO report do include one time modification costs.

4. Senator INHOFE. Secretary Roche, if the costs did include any one-time modification costs, what are the normal, annual maintenance costs of the KC–135E and KC–135R without the one-time costs?

Secretary ROCHE. The aggregate data in the July 2003 GAO report is insufficient to answer this question. The annual operating costs referenced in the GAO report include the costs of personnel, unit level consumption and depot maintenance. After discussions with the responsible GAO analyst, we received some additional information used by the GAO to support the cost data referenced in their report. The additional GAO data shows that after removal of all avionics modifications, remaining fiscal year 2001 operating costs are $3.7 million per aircraft for the KC–135D/E and $3.0 million per aircraft for the KC–135R/T. These costs are in constant year 2000 dollars.

TRAINING AND MAINTENANCE

5. Senator INHOFE. Secretary Roche, in your testimony you said you would be back in November with a training and maintenance plan. What happens between now and November that would precipitate a training plan?

Secretary ROCHE. A Training System Requirements Analysis (TSRA) was scheduled for completion in the late-November 2003 timeframe. The TSRA will provide a comprehensive analysis of our KC–767 training requirements, how training devices can best be utilized, and recommended locations for training activities. That activity, however, is currently suspended pending “new start” approval.

6. Senator INHOFE. Secretary Roche, does the Air Force currently have a long-term, centralized training plan for the 767?

Secretary ROCHE. Yes, KC–767 training is included in the lease contract with Boeing. As tanker fleet recapitalization continues beyond the initial 100 new tankers and should the decision be made to procure additional KC–767s, the Air Force will look again at the advantages of centralized training for the larger fleet. Boeing, as part of the training service, will provide the simulators and Boeing will own the simulators. The Government has the option to purchase the devices from Boeing at any time during the lease.

QUESTIONS SUBMITTED BY SENATOR ELIZABETH DOLE

SPECIAL EQUIPMENT

7. Senator DOLE. Secretary Roche and Secretary Wynne, as part of the Boeing 767 tanker lease proposal, Boeing has designated many of the components and systems of this aircraft for foreign procurement as part of a foreign procurement offset plan. Arguably, some global tanker transport aircraft will be designed for foreign customers; however, these aircraft will not share the same special mission requirements as the KC–767. As part of the lease, has the Air Force imposed any special restrictions on Boeing for U.S. specific features such as auxiliary fuel systems and other special mission equipment?

Secretary ROCHE. The Air Force has not directed Boeing to any particular U.S. subcontractor to fulfill a specific requirement such as the auxiliary fuel system or other special mission equipment. The Air Force typically does not give such direction thus avoiding the potential argument that the Government is guaranteeing

subcontractor performance. The lease does, however, include DFARS 252.225–7001, Buy American Act and Balance of Payments Program and Boeing has certified that it is providing end products manufactured in the United States.

Secretary WYNNE. The Air Force has not required that Boeing fulfill a specific requirement such as the auxiliary fuel system or other special mission equipment only through domestic sources. The lease includes DFARS 252.225–7001, Buy American Act and Balance of Payments Program, and Boeing has certified that it is providing end products manufactured in the United States.

ECONOMIC BOOST

8. Senator DOLE. Secretary Roche and Secretary Wynne, if approved, this lease plan will provide a huge economic boost for Boeing. Berry Amendment provisions for military specific aircraft, if applied correctly in this deal, could also provide an economic boost for subsystem suppliers as well. What U.S. military-only modifications are being included in the creation of the KC–767 and how many of these systems are foreign produced?

Secretary ROCHE. The Fiscal Year 2002 Supplemental Appropriations Act 107–206, Section 308, dated 12 Aug 2002, exempts the KC–767A Tanker Program from Berry Amendment application under Section 2533a of Title 10 U.S.C. The KC–767A is a commercial tanker aircraft equipped to meet Air Force requirements. There are a very limited number of USAF specific military avionics components, and all are procured or are projected to be procured from domestic sources.

Secretary WYNNE. Section 308 of the 2002 Supplemental Appropriations Act, P.L. 107–206, exempts the KC–767A Tanker Program from the provisions of section 2533a of title 10, United States Code (commonly referred to as the Berry Amendment). The KC–767A is a commercial tanker aircraft equipped to meet the requirements of the USAF. There are very few pieces of military avionics specific to the requirements of the USAF, and all are procured or are projected to be procured from domestic sources.

9. Senator DOLE. Secretary Roche and Secretary Wynne, are comparable systems or materials made in the U.S.?

Secretary ROCHE and Secretary WYNNE. The 767 tanker is a commercially offered aircraft. All systems are procured from domestic sources or are projected to be procured from domestic sources.

10. Senator DOLE. Secretary Roche and Secretary Wynne, the Boeing 767 tanker lease proposal brings to light a new aspect of weapons systems acquisition. This proposal continues the trend toward the use of commercial off-the-shelf (COTS) technology as a means of reducing often exorbitant research and development costs. The Berry Amendment requires the Department of Defense to purchase U.S. sourced and manufactured specialty metals, clothing, and textiles. This law, re-codified by Congress in 2001, preserves the "warm industrial base" that provides the items our military needs in times of both war and peace. The 100 proposed airframes will be manufactured on the commercial line then modified to fill the specific military tanker mission. Technically, this lease plan bypasses the Berry Amendment specialty metals requirements due to the dual use of commercial and military manufacturing lines. Boeing has agreed to a deal with the House Armed Services Committee to purchase the same amount of American titanium in the proposed Air Force tanker lease deal as would have been required under traditional defense procurement guidelines. Has the Air Force written this agreement into the leasing contract?

Secretary ROCHE. Section 308 of the Fiscal Year 2002 Supplemental Appropriations Act for Further Recovery From and Response to Terrorist Acts on the United States, P.L. 107–206, 116 Stat. 841, provides that 10 U.S.C. 2533a (Berry Amendment) does not apply to the Boeing tanker lease. Therefore, the tanker lease properly does not include any clauses implementing the Berry Amendment. The Air Force was not party to any agreement between the House Armed Services Committee and Boeing nor is the Air Force clear on the terms of any such agreement. If Congress changes the application of the Berry Amendment to the tanker lease, the Air Force will negotiate changes to the lease to comply with the new law.

Secretary WYNNE. Section 308 of the 2002 Supplemental Appropriations Act, P.L. 107–206, 116 Stat. 841, provides that section 2533a of title 10, United States Code (commonly referred to as the Berry Amendment) does not apply to the Boeing tanker lease. Therefore, the tanker lease properly does not include any clauses implementing the Berry Amendment. The Air Force was not party to the agreement be-

tween the House Armed Services Committee and Boeing, and thus has not memorialized the agreement as a requirement of the proposed lease contract.

11. Senator DOLE. Secretary Roche and Secretary Wynne, how does the Department of Defense plan to meet the Berry Amendment's requirements for other COTS items modified for military use?

Secretary ROCHE. The Berry Amendment (10 U.S.C. 2533a) applies to both military and commercial items acquired with appropriated funds or funds otherwise made available to the Department. Nevertheless, many COTS items are manufactured without regard to Berry Amendment requirements. The Department will examine the feasibility of incorporating Berry Amendment compliant materials and components into COTS items manufactured for military use on a case-by-case basis. If the Air Force determines that it is not feasible to incorporate Berry Amendment compliant materials and components into the manufacturing process for these items, the Air Force will consider exercising the statutory authority to grant waivers in appropriate cases.

Secretary WYNNE. The Department will have to assess each COTS case independently. In anticipation of Congress' consideration of the National Defense Authorization Act for Fiscal Year 2004, we sent a legislative proposal to Congress, with the goal of clarifying and streamlining the requirements in section 2533a of title 10, United States Code (often referred to as the Berry Amendment). The House of Representatives and the Senate each passed its own version of the Act, and each version proposes changes to the Berry Amendment. The House version has additional provisions, including those dealing with machine tools and the requirement to procure specified items from manufacturers that are part of the national technology and industrial base. Because the resulting legislation will have a significant impact, the Department is keenly interested in the results of the work of the House and Senate conferees. We hope that whatever changes are enacted will result in a statute that can be efficiently applied and enforced, will protect the defense industrial base, and will be consistent with the principles established in negotiated agreements with our counterparts in other countries regarding mutual cooperation in defense procurement.

QUESTIONS SUBMITTED BY SENATOR CARL LEVIN

USEFUL SERVICE LIFE REMAINING

12. Senator LEVIN. Secretary Roche, as late as February 2001, the KC–135 Economic Service Life Study, found that "the fleet is structurally viable to 2040," and that none of the KC–135Es and only six of the KC–135Rs would reach the end of their fatigue life (36,000 hours and 39,000 hours, respectively) by 2040. Based on that assessment, the Air Force intended to: (1) continue to convert KC–135E aircraft to the KC–135R configuration; and (2) wait until 2013 to begin KC–135 replacement. What is your latest assessment of the fatigue life remaining for the KC–135E aircraft?

Secretary ROCHE. Assessments of the KC–135 service life agree that fatigue alone will not be the driving factor for retirement; rather degradation of the aircraft structure due to corrosion is the life-limiting factor. One of our greatest concerns is a potential fleet-wide grounding event that could emerge with little or no warning because of unknown unknowns in regards to what corrosion does to aircraft. The Air Force feels that we cannot accept the risk of unknown systematic failures that could ground the tanker fleet.

DISADVANTAGES OF LEASING

13. Senator LEVIN. Director Kaplan, earlier this year, the CBO provided us with a report on the budgetary treatment of leases. In that report, CBO concludes that the use of long-term leases reduce the budget's ability to fully depict the Federal Government's financial commitments, undermine fiscal discipline by circumventing controls such as limits on deficits and caps on discretionary spending, and allow agencies to avoid facing the full costs of their purchasing decisions. Indeed, the Air Force has stated that the "dominant reason" for the lease approach is that it enables the Department to obtain tanker aircraft "without requiring significant up front funding." Do you agree or disagree with CBO's conclusion that the use of long-term leases has the effect of undermining fiscal discipline by pushing costs off into outyear budgets?

Director KAPLAN. OMB agrees that leases can be abused in some instances in the way feared by CBO. When the Air Force first brought this proposal to OMB, we had a number of questions about it. Pursuant to congressional authorization, and after nearly 2 years of discussions that ultimately involved a reduction of over 12 percent in the price per plane, the administration decided to pursue a lease because of the price reduction and the advantages it provides for urgently recapitalizing the tanker fleet. The Boeing lease does not represent an endorsement of leasing as a preferred method for acquiring military equipment or other critical assets. OMB expects agencies to know the full costs of their programs, and to conduct the appropriate analyses under OMB Circulars A–11 and A–94. OMB will review any lease proposal to ensure that appropriate analyses have been conducted, and will approve such a proposal only when leasing is the most appropriate structure in light of all the circumstances.

14. Senator LEVIN. Director Kaplan, what standards will you use to ensure that the Boeing lease does not become a precedent for other long-term leases of expensive capital equipment by the Department of Defense and other Federal agencies?

Director KAPLAN. As mentioned in the previous response, the Boeing lease is the result of exhaustive efforts to understand the implications of the transaction and to negotiate the best possible price. OMB will review any lease proposal to ensure that the agency has conducted appropriate analyses under OMB Circulars A–11 and A–94, and will approve such a proposal only when leasing is the most appropriate structure in light of all the circumstances. The Boeing lease does not represent an endorsement of leasing as a preferred method for acquiring military equipment or other critical assets. Instead, OMB anticipates that long-term leases of capital equipment will remain the exception rather than the rule.

URGENCY OF THE REQUIREMENT

15. Senator LEVIN. Secretary Roche, whatever we believe about the various cost estimates, it is clear that the Air Force is willing to pay a premium to lease the KC–767 tankers. The Air Force states that it is willing to pay this premium because the urgency of obtaining new tanker aircraft overwhelms the added costs. However, the Air Force's most comprehensive study of its existing tanker fleet—the February 2001 KC–135 Economic Service Life Study (ESLS)—concluded that "the fleet is structurally viable to 2040" and that although the cost of aircraft maintenance would increase significantly during that time, "there appears to be no run-away cost growth." On this basis, the Air Force planned to wait until 2013 to begin KC–135 replacement. Since the time of that study, the amount of time the KC–135 has spent in the depot has declined, the number of aircraft in the depot at any one time has declined, and the mission capable rates for the aircraft have increased. Also, in the fiscal year 2004 budget, the Air Force proposed reducing its tanker capacity by retiring more than 60 KC–135E tankers without any immediate replacement. This hardly seems to describe a situation so urgent that the Air Force must pay a premium to obtain new tankers early. During the hearing, you indicated that the ESLS was a faulty study. Could you provide the committee with the better studies upon which the Air Force based its decision that the requirement to replace the KC–135E tankers was so urgent as to require pursuing the leasing proposal now?

Secretary ROCHE. The Deputy Secretary of Defense, in his 22 Sep 2003 letters to Senators Warner and Levin, confirmed that structural degradation due to corrosion is the life-limiting factor. Our major concern is a potential fleet grounding event due to the unforeseen nature of corrosion. This would cripple global reach—we cannot accept the risk. This drives the Air Force to begin a rapid recapitalization of the aging KC–135 tanker fleet. Since the ESLS study release, average annual costs have increased by $250 million per year. The "KC–135E Business Case Analysis," dated 1 May 2003, updates the cost projections of the ESLS. This document was provided to SASC staff on 18 July 2003.

16. Senator LEVIN. Secretary Roche, what new information has the Air Force obtained since February 2001 that has caused it to reverse its position and determine that it is urgent to begin fielding new tanker aircraft as soon as possible?

Secretary ROCHE. The comprehensive report and briefing, "KC–135E Business Case Analysis," dated 1 May 2003, documents the cost avoidance and strategy for retiring the KC–135E. This report and briefing was provided in July to SASC members and staff. In addition, the Air Force provided "The KC–135 Aging Aircraft Story," dated 2 Aug 2002.

SOLE-SOURCE LOGISTICS SUPPORT CONTRACT

17. Senator LEVIN. Secretary Roche, most of our focus in the discussion in the hearing was related to the issue of the lease versus purchase comparisons of the proposed deal. However, the proposed agreement between Boeing and the Air Force also includes a sole-source logistics support contract of roughly $6 billion. Although Boeing is undoubtedly capable of providing this support, there appear to be other organizations in the public and private sectors that could have effectively competed for this work, had they been permitted to do so. Indeed, I understand that Boeing is not now providing logistics support for any of the 767s that it has sold in the commercial marketplace. Wouldn't the Air Force have been able to save a considerable amount of money if it had conducted a competition for logistics support, instead of awarding the contract on a sole-source basis to Boeing?

Secretary ROCHE. Our contract terms with Boeing require them to cover the costs of parts obsolescence and diminishing manufacturing sources (for both green a/c and modification) to ensure aircraft availability. These are two areas that the original equipment manufacturer is best prepared to address due to their relationship with the vendor base and availability of data. In addition, for the tanker unique aspects of the KC–767, the data required for support is Boeing proprietary.

18. Senator LEVIN. Secretary Roche, some Air Force officials have told us that some aspects of logistics support could not be awarded to a contractor without Boeing's approval, because of Boeing's proprietary data in the refueling system. If this is the case, couldn't the sole-source award have been limited to those aspects of the system?

Secretary ROCHE. Breaking the support of the aircraft into smaller "pieces" would drive the cost for general and administrative support higher to carry multiple contractors. For these reasons, the Air Force justified a sole source justification and approval for the lease and support of the KC–767A tanker.

BOEING'S ROLE IN DRAFTING THE REQUIREMENT

19. Senator LEVIN. Secretary Roche, an article in U.S. News and World Report earlier this month states that the Air Force allowed Boeing to help draft the requirements for the tanker aircraft to be leased. The article states that an unnamed Pentagon panel later "chastised the Air Force for tailoring its requirements to the Boeing 767 and concluded that the document 'should not be written for a specific aircraft.'" In fact, Senator McCain has provided us with a Boeing document in which company officials refer to an objective of "establish[ing] clearly defined requirements for the USAF tanker configuration that results in an affordable solution that meets the USAF mission needs and will prevent an [Analysis of Alternatives] from being conducted." Did Boeing in fact participate in drafting the Air Force's requirement for tanker aircraft? If so, isn't this inconsistent with DOD acquisition regulations?

Secretary ROCHE. The Air Force did share the draft operational requirements document with Boeing as the legislation was being finalized (i.e. prior to Dec 2001). However, working with industry early in the acquisition process is encouraged by DOD acquisition regulations. In fact, according to the Chairman of the Joint Chiefs of Staff Memorandum 3170.01, "The intent is to share capstone requirements documents with allies and industry wherever possible. Early collaboration should be encouraged wherever possible."

LOGISTICS SUPPORT COSTS

20. Senator LEVIN. Secretary Roche, Mr. Curtin's prepared testimony on page 16 states that the total operating and support cost including logistics support and flying hour costs for the KC–767 tanker fleet of 100 aircraft would be $808 million in constant fiscal year 2002 dollars, or $8.08 million per aircraft. The statement also quotes an Air Force prediction that the KC–135 fleet of 510 aircraft would require a total operating and support cost expenditure of roughly $3.5 billion in fiscal year 2002 dollar terms, or an average of about $6.4 million per aircraft per year. As I understand it, within that total KC–135 expenditure, the Air Force is predicting that the KC–135R aircraft would require roughly $2.7 billion, or $6.5 million per aircraft and the KC–135E aircraft would require $773 million or roughly $8.3 million per aircraft. I note that one of the reasons that the Air Force wants to retire the KC–135E aircraft is because they are expecting increasing maintenance costs. However, based on these estimates, it would not appear that the KC–767 logistics

support costs will be greatly reduced from those of the current fleet of tankers. Do you have any reason to believe that operating and support costs for the KC–767 tanker will not increase over time?

Secretary ROCHE. The Air Force has negotiated a fixed price contract for integrated fleet support for the duration of the KC–767 lease. The cost per year in constant year dollars will remain static throughout this contract and will not increase. More importantly, the more capable KC–767 will fly twice as many hours as a KC–135 and thus will be less expensive to operate. The support cost per flying hour costs (calendar year 2002 dollars) for the KC–767 is $10,800 per hour. The support cost per flying hour for the KC–135E is $27,000 and $17,700 for the KC–135R. These are the estimated costs for operations in 2012 (expressed in calendar year 2002 dollars) when 100 KC–767s will be in the inventory. If the flying hours for KC–135 were increased to 750 flying hours per year (the projected flying hour for the KC–767), the support cost-per-flying-hour for the KC–135E would be $16,300 and $10,600 for the KC–135R.

21. Senator LEVIN. Secretary Roche, if the cost per year is already at roughly $8.1 million per aircraft per year for the KC–767, and as the Air Force points out, support costs for any aircraft are likely to grow over time, do you have any estimate of how these costs might increase beyond the current estimate in later years?

Secretary ROCHE. The Air Force has negotiated a firm fixed price contract for integrated fleet support (IFS) for the duration of the KC–767 lease. The cost per year in constant year dollars will remain static throughout this contract and will not increase. When this contract expires, the Air Force has many options for this IFS contract. They include competing the IFS contract and performing IFS by the government. The aircraft industry has made many corrosion prevention improvements in metallurgy as well as coatings over the years between KC–135 production and KC–767 production. We anticipate lower sustainment costs for the KC–767 as it ages compared to the KC–135.

LOGISTICS SUPPORT COST ASSUMPTIONS

22. Senator LEVIN. Secretary Roche, all of the Air Force assumptions about the logistics support contract costs assume an annual flying hour total of 750 hours per aircraft. The Air Force is now flying the KC–135Es and KC–135Rs at a rate closer to 300–400 hours per year. I would note that one of the reasons that the Air Force has claimed that it needed to retire roughly half of the KC–135E fleet (68 aircraft) in the Future Years Defense Program is that you do not have enough crews to keep up with the current flying hour program. Isn't this assumed utilization rate too optimistic for the KC–767?

Secretary ROCHE. No, the KC–767 utilization rate is based on the planned crew ratio of 2.0 as compared to the current 1.3 crew ratio for the KC–135 fleet. As a result, the KC–767 is envisioned being used similar to the KC–10 and should fulfill the projected 750 hours per aircraft. 600 of the projected flight hours are required during peacetime to ensure adequate experience levels throughout the crew force. The additional 150 hours are provided for contingency operations.

23. Senator LEVIN. Secretary Roche, what would be the cost difference in total support costs from assuming a more reasonable 400 hours-per-year rate?

Secretary ROCHE. Our warfighters established 750 flying hours per year as the expected utilization rate, in line with how AMC operates the KC–10. The IFS contract has the flexibility to adjust for changes in OPTEMPO scaling the level of support based on need. As such, fleet cost estimates provided by the KC–767 System Program Office for 100 KC–767 operating at 400 annual flying hours is $679 million (calendar year 2002 dollars) and at 750 annual flying hours is $808 million. Cost per flying hour for 400 annual flying hours is $17,000 while for 750 flying hours is $10,800.

LIFE CYCLE COST ANALYSES

24. Senator LEVIN. Secretary Roche, in response to a question from Senator Reed during the hearing, you indicated that the Air Force had completed life cycle cost analyses of the tanker situation, presumably including life cycle costs of the current KC–135E force and of the proposed KC–767 force. Could you provide those analyses for the record?

Secretary ROCHE. As I stated to Senator Reed during the hearing, the earlier we have these new aircraft in place, the more operational savings we will be able to

realize. The support cost-per-flying-hour (calendar year 2002 dollars) for the KC–767 is $10,800 per hour. The support cost-per-flying-hour for the KC–135E is $27,000 and $17,700 for the KC–135R. These are the estimated costs for operations in 2012 (expressed in calendar year 2002 dollars) when 100 KC–767s will be in the inventory. Cost avoidance of accelerating retirement of KC–135Es by 5 years is $6.3 billion (then-year dollars). The details of this cost avoidance is included in the comprehensive report and briefing, "KC–135E Business Case Analysis," dated 1 May 2003. This report and briefing were provided in July to SASC members and staff. If the flying hours for KC–135 were increased to 750 flying hours per year (the projected flying hour for the KC–767), the support cost-per-flying-hour for the KC–135E would be $16,300 and $10,600 for the KC–135R.

PROFITS IN THE CONTRACT

25. Senator LEVIN. Secretary Roche, a CRS report assesses that Boeing is making roughly 6 percent return on sales for its commercial sales of B–767 aircraft. The proposed Air Force leasing deal would cap Boeing profits at no more than 15 percent return on sales for the commercial aircraft (so-called "green aircraft") and 15 percent return on sales for the refueling modification. There may be some additional risk in modifying the aircraft to tanker configuration that would merit a potentially higher return, but why would the Air Force agree to pay a potential premium for an unmodified aircraft above what Boeing is apparently receiving on its commercial orders?

Secretary ROCHE. Boeing has assumed tremendous risk in this program in both undertaking a firm fixed price development of $1.4 billion and in the first-time manufacturing of the tanker. Because of this high risk, a high "potential" reward is merited. Although it may be argued that the "green" component of the tanker is low risk and has been "assumed" to deliver a 6-percent profit, it is important to recognize that we have both a profit cap and a most favored customer clause. Since the Air Force is getting the best, most favored price, Boeing's profit will be, at best, at the 6-percent level. The profit level is a cap and not a mandate of profit. By allowing a higher cap, we incentivize Boeing to be as efficient as possible so as to get a better price for future commercial 767 derivatives.

[Whereupon, at 1:15 p.m., the committee adjourned.]

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